NASA

Aeronautical Engineering 1978 Cumulative Index

NASA SP-7037 (105)
January 1979

CASE FILE COPY

National Aeronautics and
Space Administration

Aeronautical Engineering Aer
ering Aeronautical Engineerin
ngineering Aeronautical Engin
cal Engineering Aeronautical E
nautical Engineering Aeronaut
Aeronautical Engineering Aer
ering Aeronautical Engineering
ngineering Aeronautical Engine
cal Engineering Aeronautical E
nautical Engineering Aeronaut
Aeronautical Engineering Aer
ring Aeronautical Engineering

SUPPLEMENTS COVERED IN THIS INDEX

Document	*Page Range*	*Date*	*Coverage*
NASA SP-7011(93)	1-47	February 1978	January 1978
NASA SP-7011(94)	49-103	March 1978	February 1978
NASA SP-7011(95)	105-155	April 1978	March 1978
NASA SP-7011(96)	157-213	May 1978	April 1978
NASA SP-7011(97)	215-271	June 1978	May 1978
NASA SP-7011(98)	273-326	July 1978	June 1978
NASA SP-7011(99)	327-367	August 1978	July 1978
NASA SP-7011(100)	369-413	September 1978	August 1978
NASA SP-7011(101)	415-460	October 1978	September 1978
NASA SP-7011(102)	461-505	November 1978	October 1978
NASA SP-7011(103)	507-568	December 1978	November 1978
NASA SP-7011(104)	569-636	January 1979	December 1978

This bibliography was prepared by the NASA Scientific and Technical Information Facility operated for the National Aeronautics and Space Administration by Informatics Information Systems Company.

SPECIAL NOTICE

The abstract sections of the monthly supplements of *Aeronautical Engineering* can be bound separately Individual abstracts can be located readily by means of the page numbers given at each entry, e g , p0194 N78-16002 To assist the user in binding Supplements SP-7037 (93) through SP-7037 (104), a title page is included in the back of this Cumulative Index

NASA SP-7037 (105)

A CUMULATIVE INDEX TO AERONAUTICAL ENGINEERING

A Continuing Bibliography

This Cumulative Index supersedes the indexes contained in supplements SP-7037 (93) through SP-7037 (104).

Scientific and Technical Information Branch 1979
National Aeronautics and Space Administration
Washington, DC

This Index is available from the National Technical Information Service (NTIS), Springfield, Virginia 22161 for $9.00 domestic, $18 00 foreign

INTRODUCTION

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7037(93) through NASA SP-7037(104) of *Aeronautical Engineering A Continuing Bibliography* NASA SP-7037 and its supplements have been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA) and the National Aeronautics and Space Administration (NASA) Entries prepared by the two contributing organizations are identified as follows

1 NASA entries by their *STAR* accession numbers (N78-10000 series)
2 AIAA entries by their *IAA* accession numbers (A78-10000 series)

HOW THIS CUMULATIVE INDEX IS ORGANIZED

This Cumulative Index includes a subject index, a personal author index, a corporate source index, a contract number index, and a report/accession number index

HOW TO USE THE SUBJECT INDEX

Two types of cross-references appear in the subject index

1 Use (U) references indicate that the subject term is not "postable," i e , not a valid term, and the following term or terms are used instead For example

AIRCRAFT PROTUBERANCES
U PROTUBERANCES
FLIGHT PERFORMANCE
U FLIGHT CHARACTERISTICS

2 Narrower Term (NT) references refer the user to more specific headings in the same subject area, under which additional material on the subject may be found For example

FLOW RESISTANCE
NT AERODYNAMIC DRAG
NT FRICTION DRAG
NT SUPERSONIC DRAG

In addition, a searcher may use the title or title and title extension in the index to narrow further his quest for particular items This is because subject terms readily include more than one class of document For example

AIRLINE OPERATIONS
All-weather operations, including
pilot role, instrument landing
systems and guidance aids
Airport congestion as constraint on
air travel, considering runway
capacity and adjusted demand

illustrates a case where two references on different topics are listed under the same subject term

HOW TO USE THE PERSONAL AUTHOR INDEX

All personal authors used in the abstract-section citations in the individual Supplements appear in the index Differences in transliteration schemes may require multiple searching of the index for variants of an author's name For example

EMELIANOV, M D
and
YEMELYANOV, M D

HOW TO USE THE CORPORATE SOURCE INDEX

The corporate source index entries are abridged versions of the corporate sources used in the abstract-section citations in the individual Supplements The corporate source supplementary (organizational component) does not appear in the index For example

BOEING CO , SEATTLE, WASH MILITARY AIRCRAFT SYSTEMS DIV (Source citation entry)

BOEING CO , SEATTLE, WASH (Source index entry)

HOW TO USE THE CONTRACT NUMBER INDEX

All contract numbers that are identified in the abstract-section citations in the individual Supplements appear in this index Changes by agencies in the style in which contract numbers are presented may require multiple searching for variants For example

AF 33(615)-71-C-1758
F33615-71-C-1758

HOW TO USE THE REPORT/ACCESSION NUMBER INDEX

All report numbers that have been assigned by the corporate source, monitoring agency or cataloging activity appear in this index Variations in initial cataloging may result in different report number series For example

TP-924
ONERA-TP-924

IDENTIFICATION OF DESIRED SUPPLEMENT

The abstract and descriptive cataloging for any accession number selected from the indexes may be found in the appropriate Supplement The page-number range of each Supplement appears on the inside front cover of this index Once the range of page numbers containing the selected accession number is located in the second column, the desired Supplement number will be found in the first column For example

Page 331 will be found in Supplement 99

AVAILABILITY OF DOCUMENTS

Information concerning the availability of documents announced in the *Aeronautical Engineering* supplements is found in the Introduction to the most currently issued monthly supplement

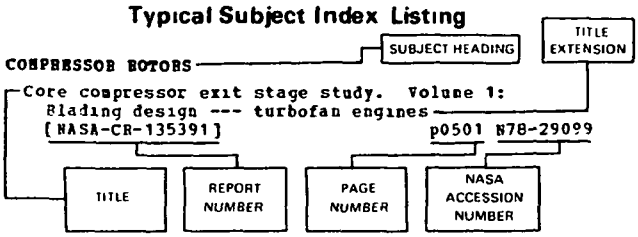
TABLE OF CONTENTS

SUBJECT INDEX A-1
PERSONAL AUTHOR INDEX B-1
CORPORATE SOURCE INDEX C-1
CONTRACT NUMBER INDEX D-1
REPORT/ACCESSION NUMBER INDEX E-1

SUBJECT INDEX

1978 Cumulative Index

Typical Subject Index Listing



The title is used to provide a description of the subject matter When the *title is insufficiently descriptive of the document content* a title extension is added separated from the title by three hyphens The *STAR* or *IAA* accession number is included in each entry to assist the user in locating the abstract in the abstract section of an individual issue of *Aeronautical Engineering* If applicable a report number is also included as an aid in identifying the document The page and accession numbers are located beneath and to the right of the title Under any one subject heading the accession numbers are arranged in sequence with the *IAA* accession numbers appearing first

A

A-4 AIRCRAFT
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
A-6 AIRCRAFT
A-6E TRAM --- Target Recognition Attack Multisensor system retrofit for all-weather operations
p0051 A78-13650
A-7 AIRCRAFT
A-7 ALOFT demonstration and economic analysis --- fiber optics interface for navigation and weapons delivery
p0054 A78-14939
Overview of the advanced aircraft electrical system /AAES/ A-7E prototype design
p0061 A78-15573
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
The extension of GPMS architecture for the distribution of audio signals within Navy aircraft
[AD-A044739] p0090 N78-12299
Study to identify stress corrosion prone parts on the TA-7C aircraft
[AD-A045489] p0100 N78-13186
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
A-10 AIRCRAFT
Evolution of a cost-effective, task-oriented, lateral-directional SAS for the A-10 aircraft --- Stability Augmentation System
[AIAA PAPER 78-1460] p0512 A78-47910
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
A-37 AIRCRAFT
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
A-300 AIRCRAFT
Ceramic composite protection for turbine disc bursts --- for the A-300 aircraft
p0026 N78-10083
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Fatigue strength of the upper guide rail of the A-300 no. 4 landing flap support (tests, results, and evaluation)
[DLR-IB-152-77/09] p0038 N78-11057
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B
[DLR-IB-152-77/11] p0038 N78-11058
ABLATION
Effect of temperature-dependent heat capacity on aerodynamic ablation of melting bodies
p0571 A78-50455
Investigation of a side force due to ablation --- reentry vehicle spin dynamic stability tests
p0571 A78-50457
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
ABLATIVE MATERIALS
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
ABLATIVE NOSE CONES
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759
Hardened reentry vehicle development program. Erosion-resistant nosetip technology
[AD-A056390] p0630 N78-33128
ABRASION RESISTANCE
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
ABSORPTION SPECTROSCOPY
Recent results on early diagnosis of damage in moving parts of aircraft engines
p0115 A78-18506
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320
ABSTRACTS
Bibliography of Lewis Research Center technical contributions announced in 1976
[NASA-TM-73860] p0213 N78-17921
Parachutes and decelerators, volume 2. A bibliography with abstracts
[NTIS/PS-78/0320] p0406 N78-25067
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091

Flow visualization, volume 1. A bibliography with abstracts
[NTIS/PS-78/0425/5] p0458 N78-27379
Flow visualization, volume 2. A bibliography with abstracts
[NTIS/PS-78/0426/3] p0459 N78-27380
Closed loop control systems. Part 1: Aircraft. A bibliography with abstracts
[NTIS/PS-78/0809/0] p0630 N78-33122

AC GENERATORS
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
Modeling refinements for the rectified superconducting alternator --- airborne power supply
p0536 A78-49961

ACCELERATED LIFE TESTS
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188

ACCELERATION (PHYSICS)
NT DECELERATION
NT HIGH ACCELERATION
NT HIGH GRAVITY ENVIRONMENTS
NT SPIN REDUCTION
Characteristics of the jet acceleration of a flow to hypersonic speeds
p0166 A78-20953
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
A compensation technique for acceleration-induced frequency changes in crystal oscillators
p0530 A78-49859
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142

ACCELEROMETERS
Dynamics of a string accelerometer
p0131 A78-20256
The dissection of an aircraft loads spectrum produced by peak-counting accelerometers
[LTR-ST-951] p0202 N78-16391
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 30 June 1977
[AD-A047857] p0207 N78-17045
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 31 December 1977
[AD-A055672] p0562 N78-31098

ACCEPTABILITY
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
Evaluation of slimpack style parachute in CT4A airtrainer aircraft
[AD-A047083] p0195 N78-16024
LACV-30 test and demonstration report --- air cushion vehicles
[AD-A053610] p0492 N78-28276

ACCEPTANCE
U ACCEPTABILITY

ACCESSORIES
Maintenance of gas turbine accessory equipment
p0597 A78-53175

ACCIDENT INVESTIGATION
NT AIRCRAFT ACCIDENT INVESTIGATION

ACCIDENT PREVENTION
Brief ecological survey of airports and the bird hazard problem
p0115 A78-18666
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
How to make an airport unattractive to birds
p0275 A78-29209
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
Fire detector response in aircraft applications
p0599 A78-53678

ACCIDENTS
NT AIRCRAFT ACCIDENTS
NT BIRD-AIRCRAFT COLLISIONS

ACCRETION
U DEPOSITION

ACCURACY
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
Accurate timing in landings through air traffic control
p0433 N78-26067

ACIDS
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617

ACOUSTIC ATTENUATION
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
A study of fan-rotating noise reduction
p0577 A78-50620
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876

ACOUSTIC COMBUSTION
U COMBUSTION STABILITY

ACOUSTIC DUCTS
Study of the propagation of higher modes in cylindrical ducts with impedance walls --- for aircraft noise reduction
p0221 A78-25773
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143

ACOUSTIC EMISSION
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
Wake cutting experiments --- turbulent wake-blade (airfoil) interaction
p0336 A78-34843
On an acoustic field generated by subsonic jet at low Reynolds numbers
[NASA-CR-156182] p0356 N78-22858
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics --- A-U461, A-U26M T6
[AAAP-NT-77-35] p0403 N78-24587
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493

ACOUSTIC EXCITATION
A synthesis of the effects of noise on structures --- aircraft structural fatigue
p0121 A78-19078

ACOUSTIC FATIGUE
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
A synthesis of the effects of noise on structures --- aircraft structural fatigue
p0121 A78-19078
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
Methods and equipment for testing for acoustic fatigue --- of aircraft structural components
p0283 A78-30354
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231

Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941

ACOUSTIC GENERATORS
U SOUND GENERATORS

ACOUSTIC IMPEDANCE
Investigation of ground reflection and impedance from flyover noise measurements
[NASA-CR-145302] p0251 N78-18874

ACOUSTIC MEASUREMENTS
NT NOISE MEASUREMENT
In-flight measurement of aircraft acoustic signals
p0105 A78-17364
Two point correlations of jet noise
p0176 A78-23219
Type measurements of aircraft interior sound pressure levels in cruise
[SAE ARP 1323] p0471 A78-44689
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report --- outdoor static and 40 x 80 ft. wind tunnel tests
[NASA-CR-152076] p0271 N78-19899
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Acoustic evaluation of a novel swept-rotor fan --- noise reduction in turbofan engines
[NASA-TM-78878] p0403 N78-24897
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097

ACOUSTIC NOZZLES
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394

ACOUSTIC PROPAGATION
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
Some characteristics of sonic boom propagation in an inhomogeneous atmosphere
p0128 A78-19691
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
The location of the ground focus line produced by a supersonic aircraft
p0178 A78-23457
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
Resolution enhanced sound detecting apparatus --- wind tunnel apparatus for airframe noise localization
[NASA-CASE-NPO-14134-1] p0271 N78-19898
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909

ACOUSTIC PROPERTIES
NT ACOUSTIC IMPEDANCE
NT ACOUSTIC SCATTERING
NT ACOUSTIC VELOCITY
NT SOUND INTENSITY
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
Acoustical properties of materials and muffler configurations for the 80 by 120 foot wind tunnel
[NASA-CR-152065] p0030 N78-10116
Acoustic investigation of upper surface blown flaps
p0092 N78-13005
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TN-D-8235] p0194 N78-15999
Effect of design changes on aerodynamic and acoustic performance of translating-centerbody sonic inlets
[NASA-TP-1132] p0236 N78-17998
Powered-Lift Aerodynamics and Acoustics --- conferences
[NASA-SP-406] p0389 N78-24046
Flight effects on the aerodynamic and acoustic characteristics of inverted profile coannular nozzles
[NASA-CR-3018] p0621 N78-32836

ACOUSTIC RADIATION
U SOUND WAVES

ACOUSTIC SCATTERING
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831

ACOUSTIC STABILITY
U FREQUENCY STABILITY

ACOUSTIC STREAMING
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
Wind-tunnel investigation of the aerodynamic performance, steady and vibratory loads, surface temperatures and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-X-72794] p0140 N78-14031

ACOUSTIC VELOCITY
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756

ACOUSTIC VIBRATIONS
U SOUND WAVES

ACOUSTICS
NT AEROACOUSTICS
NT BIOACOUSTICS
NT PSYCHOACOUSTICS
New structuralization and work of current interest in the research area of fluid mechanics --- propulsion systems, aerodynamics and acoustics
p0337 A78-34941
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840

ACOUSTO-OPTICS
Self-focusing of a Gaussian beam in a supersonic gas flow
p0585 A78-51387

ACQUISITION
NT DATA ACQUISITION
NT TARGET ACQUISITION
ACTINIDE SERIES COMPOUNDS
NT PLUTONIUM OXIDES
ACTINOMETERS
NT INFRARED DETECTORS
NT INFRARED SPECTROMETERS
NT PYRANOMETERS
NT RADIOMETERS
NT SPECTRORADIOMETERS
ACTUATORS
Primary flight control actuation with electric motors
p0067 A78-15689
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Research and development of aircraft control actuation systems. The development of a direct drive fly-by-wire flight control system and evaluation of a force sharing fly-by-wire actuator
[AD-A047283] p0200 N78-16065
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
Electromechanical flight control actuator, volume 2
[NASA-CR-151734] p0413 N78-25986
Electromechanical flight control actuator, volume 3
[NASA-CR-151735] p0413 N78-25987
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
ACUITY
NT VISUAL ACUITY
ADAPTIVE CONTROL
NT SELF ADAPTIVE CONTROL SYSTEMS
Adaptive control laws for F-8 flight test
p0013 A78-12358
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
A moving window parameter adaptive control system for the F8-DFBW aircraft
p0013 A78-12361
Sensor failure detection using analytical redundancy
p0182 A78-23862
Active reference null steering for spread spectrum signals
p0226 A78-27038
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040
An adaptive interference cancellation system for elimination of co-located interference signals --- for ATC sites
p0227 A78-27041
Gust-alleviation control systems for aircraft
p0470 A78-44397
Stability augmentation by eigenvalues control and model matching
p0507 A78-46965
A learning flight control system for the F8-DFBW aircraft --- Digital Fly-By-Wire
[AIAA 78-1288] p0542 A78-50195
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
A learning control system with application to flight systems
p0629 N78-33112
Closed loop control systems. Part 1: Aircraft. A bibliography with abstracts
[NTIS/PS-78/0809/0] p0630 N78-33122
ADAPTIVE CONTROL SYSTEMS
U ADAPTIVE CONTROL
ADAPTIVE FILTERS
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
Suboptimal adaptive filtering of radio signals
p0601 A78-53903
ADDITIVES
NT ANTIOXIDANTS
NT PROPELLANT ADDITIVES
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079
ADHESIVE BONDING
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
Nondestructive testing of adhesive bonded structure
p0480 A78-45937
Adhesion of erosion resistant tapes on several surface configurations
[FOK-R-2132] p0442 N78-26220
Spacelab: Testing of Metalbond 328 WC and foam adhesive BSL 208/5
[FOK-R-2162] p0442 N78-26221
Fracture mechanics for structural adhesive bonds
[AD-A054023] p0504 N78-29509
Adhesive bonded aerospace structures standardized repair handbook
[AD-A055684] p0614 N78-32270
Primary Adhesively Bonded Structure Technology (PABST). Phase 1: Detail design
[AD-A056857] p0626 N78-33095
ADHESIVES
Spacelab: Testing of Metalbond 328 WC and foam adhesive BSL 208/5
[FOK-R-2162] p0442 N78-26221
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
ADIABATIC CONDITIONS
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
ADJUSTING
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
ADJUSTMENT
U ADJUSTING
ADMINISTRATION
U MANAGEMENT
ADMITTANCE
U ELECTRICAL IMPEDANCE
ADVANCED AIRBORNE COMMAND POST
U E-4A AIRCRAFT
ADVANCED TECHNOLOGY LIGHT TWIN AIRCRAFT
U ATLIT PROJECT
AERIAL EXPLOSIONS
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064
AERIAL IMAGERY
U AERIAL PHOTOGRAPHY
AERIAL PHOTOGRAPHY
The ITC PHOTNAV system --- for cadastral aerial survey photography operations
p0074 A78-16536
A camera system for small format aerial photography
p0337 A78-34873
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988

AERIAL RECONNAISSANCE
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
Aircraft Satellite Data Link
p0338 A78-34971
The RF-15: Reconnaissance derivative of the F-15
p0415 A78-40219
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles --- German thesis
p0592 A78-52498
AERIAL RUDDERS
An integrated system of control for hovercraft using differentially acting 'elevons'
p0333 A78-34012
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
AEROACOUSTICS
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
The assessment of noise, with particular reference to aircraft
p0074 A78-16595
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft
[AIAA PAPER 78-242] p0162 A78-20765
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
Study of the propagation of higher modes in cylindrical ducts with impedance walls --- for aircraft noise reduction
p0221 A78-25773
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
The noise from the large-scale structure of a jet
p0227 A78-27144
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
Aircraft noise and its sources
p0283 A78-30351
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
Measuring noise in aircraft cabins
p0283 A78-30353
Methods and equipment for testing for acoustic fatigue --- of aircraft structural components
p0283 A78-30354
Methods of reducing aircraft noise
p0283 A78-30355
Evaluation of airframe noise prediction methods
p0329 A78-33088
Prospects for supersonic jet noise suppression
p0329 A78-33089
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
Rotor-stator interaction noise with hindsight --- turbomachine acoustics
p0329 A78-33093
Wake cutting experiments --- turbulent wake-blade (airfoil) interaction
p0336 A78-34843
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
A study of fan-rotating noise reduction
p0577 A78-50620
Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures
p0580 A78-50780
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
Powered-Lift Aerodynamics and Acoustics --- conferences
[NASA-SP-406] p0389 N78-24046
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071
Helicopter Acoustics
[NASA-CP-2052-PT-1] p0618 N78-32816
Theory on acoustic sources
p0619 N78-32824
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
AERODYNAMIC AXIS
U AERODYNAMIC BALANCE
AERODYNAMIC BALANCE
Some operational experience of Concorde weight and balance
p0110 A78-17892
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data
[AIAA 78-1373] p0485 A78-46561
Simple numerical model for calculation of entry vehicle trim response
p0585 A78-51284
Aerodynamic centre of wing-fuselage-nacelle combinations: Effect of wing-pylon mounted nacelles
[ESDU-77012] p0079 N78-12010
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
AERODYNAMIC BRAKES
NT LEADING EDGE SLATS
NT TRAILING-EDGE FLAPS
NT WING FLAPS
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
Irrotational flow around a spherical segment --- aerodynamic brakes application
p0588 A78-51688
AERODYNAMIC BUZZ
U FLUTTER

AERODYNAMIC CENTER
U AERODYNAMIC BALANCE
AERODYNAMIC CHARACTERISTICS
NT AERODYNAMIC BALANCE
NT AERODYNAMIC DRAG
NT AERODYNAMIC STABILITY
NT INTERFERENCE DRAG
NT INTERFERENCE LIFT
NT JET LIFT
NT LIFT
NT ROTOR LIFT
NT STATIC AERODYNAMIC CHARACTERISTICS
NT SUPERSONIC DRAG
NT ZERO LIFT
Supercritical cascade design
p0012 A78-12302
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
The aerodynamic design of blower tunnels with wide-angle diffusers
p0075 A78-16647
Aerodynamic characteristics of a rectangular wing with a tip clearance in a channel
p0106 A78-17427
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
Aerodynamic behavior of an axial-flow compressor in the presence of inflow disturbances
[DGLR PAPER 77-064] p0116 A78-18706
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
A new mathematical method for the aerodynamic smoothing of profiles
p0118 A78-19039
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
The aerodynamic design of cascade airfoils - A new exact method based on conformal mapping
p0121 A78-19072
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
The lifting force of a low-aspect-ratio wing and body combination
p0129 A78-19709
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251
Machine algorithm for determining the cross sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
Aerodynamic characteristics of a system of airfoil profiles
p0132 A78-20275
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
Asymptotic theory of a wing moving at small distances from a solid wall
p0133 A78-20462
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Some applications of a test track for aerodynamic testing
[AIAA PAPER 78-167] p0160 A78-20719
EPF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
Approximate wind-tunnel simulation of the dynamics of a system composed of a body with a trailing cable
p0165 A78-20902
The effect of blunting the leading edge of a delta wing on its aerodynamic characteristics during supersonic flight
p0166 A78-20920
Supersonic flow near a thin trapezoidal wing
p0166 A78-20921
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
Hypersonic flow past a conical wing with detached shock wave at the leading edges
p0169 A78-22078
Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
Modeling the influence of the ground effect on the aerodynamic characteristics of a wing by means of a flat screen of finite dimensions
p0174 A78-22634
Uniformly precise conformal mapping of the exterior of a circle onto the exterior of a wing section
p0174 A78-22642
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation --- German book
p0175 A78-22937
Why the flexible wing. II --- for glider design
p0176 A78-23058
Successive-approximation calculation of a steady subsonic gas flow about an airfoil lattice
p0186 A78-24085
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
Design of a transonically profiled wing
[DGLR PAPER 77-026] p0189 A78-24417
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
The aerodynamic behaviour of fully inflated parachutes
p0275 A78-29215
Helicopters: Calculation of integral aerodynamic performance and air-technical data --- Russian book
p0281 A78-30124
Dynamic response of lift fans subject to varying backpressure --- for Surface Effect Ships
[AIAA PAPER 78-756] p0292 A78-32176
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale

lifting parachutes
[AIAA 78-785] p0295 A78-32343
Some contributions to aerodynamic theory for vertical-axis wind turbines
p0327 A78-32534
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
Calculation of the aerodynamic characteristics of a wing moving with subsonic velocity under a slight effect of a shock wave
p0334 A78-34442
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
Influence of slip on the aerodynamic behavior of a wing at hypersonic speeds
p0342 A78-35916
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Remarks on design of supersonic wind tunnels
p0369 A78-36216
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
Aerodynamics of the annular wing
p0379 A78-38475
Local method in rarefied gas aerodynamics
p0380 A78-38726
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Aerodynamics of slender lifting surface in accelerated flight
p0416 A78-40836
Strake-wing analysis and design
[AIAA PAPER 78-1201] p0423 A78-41891
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
Airframes and aerodynamics --- aircraft design in NASA Energy Efficient Transport program
p0461 A78-43359
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
The effect of over-the-wing nacelles on wing-body aerodynamics
[AIAA PAPER 78-1083] p0466 A78-43589
Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
Aerodynamic design of thick, supercritical wings through the concept of equivalent subsonic pressure distribution
[NLR-MP-78011-U] p0477 A78-45230
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
Development of low sweep, high aspect ratio wings designed for high Reynolds number
p0477 A78-45233
Flow development on a supercritical wing
p0477 A78-45234
The supercritical wing - An evolution or a revolution
p0478 A78-45239
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data
[AIAA 78-1373] p0485 A78-46561
Progress in propeller aerodynamics
p0507 A78-47173
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
Modeling ground plane influence on wing aerodynamic characteristics using a finite plane screen
p0518 A78-48216
Uniformly exact conformal transformation of exterior of circle onto exterior of wing profile
p0518 A78-48224
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
Asymptotic theory of a wing moving near a solid wall
p0518 A78-48248
Application of cryogenics in experimental aerodynamics
p0522 A78-48982
Lateral-aerodynamic characteristics of highly-dihedraled wings
p0523 A78-49334
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618
A theoretical and experimental analysis of the influence of coolant discharge from perforated turbine blades on their aerodynamic behavior
p0580 A78-50777
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
The aerodynamic performance of a freely hinged door between two flows --- for supersonic transport propulsion nozzles
p0586 A78-51464
The short-haul jet designed with ATC in mind
p0587 A78-51516
Optimization of quasi-stationary long distance flights in the case of different directions for conducting the flight according to a model which has been idealized to a large extent --- German thesis
p0589 A78-51749
VTOL aircraft dynamics --- Russian book
p0598 A78-53428
An algorithm for complex study of the aerodynamic characteristics of spacecraft
p0599 A78-53506
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at

temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28
[NASA-TM-73250] p0079 N78-12011
Effects of external stores on the aerodynamic characteristics of a 60 deg delta-wing fighter model at Mach 1.60 to 2.87 --- conducted in the Langley Unitary Plan wind tunnel
[NASA-TM-74090] p0081 N78-12033
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
Hydromechanical properties of an isolated wing moving above a screen
[AD-A044692] p0091 N78-12379
Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
Theoretical and experimental analysis of longitudinal and lateral aerodynamic characteristics of skewed wings at subsonic speeds to high angles of attack
[NASA-TN-D-8512] p0093 N78-13015
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
A preliminary study of the performance and characteristics of a supersonic executive aircraft
[NASA-TM-74055] p0095 N78-13040
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
Development of an ultra high level airdrop container concept
[AD-A046156] p0138 N78-14017
Wind-tunnel investigation of the aerodynamic performance, steady and vibratory loads, surface temperatures and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-X-72794] p0140 N78-14031
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane
[VTH-LR-226] p0148 N78-15019
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TN-D-8235] p0194 N78-15999
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 1.5 to 2.0 --- conducted in the Ames 9 by 7 foot supersonic wind tunnel
[NASA-TM-73271] p0199 N78-16062
The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2 --- tabulated test results
[NASA-CR-2915] p0203 N78-16998
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Numerical aerodynamic simulation facility. Preliminary study extension. Executive summary
[NASA-CR-152106] p0252 N78-19050
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics
[NASA-TM-78471] p0253 N78-19056
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
LASTOP: A computer code for laser turrets optimization of small perturbation turrets in subsonic or supersonic flow
[AD-A049272] p0255 N78-19076
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8473] p0299 N78-20064
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130

Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
Comparison of aerodynamic data measured in air and Freon-12 wind-tunnel test mediums
[NASA-TM-78671] p0312 N78-21052
Low-speed aerodynamic characteristics from wind-tunnel tests of a large-scale advanced arrow-wing supersonic-cruise transport concept
[NASA-CR-145280] p0312 N78-21053
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data
p0322 N78-21148
System optimization by periodic control
[AD-A049522] p0323 N78-21162
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
Aerodynamic phenomena in an oscillating transonic MCA airfoil cascade including loading effects
p0347 N78-22066
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043
Powered-Lift Aerodynamics and Acoustics --- conferences
[NASA-SP-406] p0389 N78-24046
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Aerodynamic characteristics in ground proximity
p0390 N78-24055
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle
[PB-277674] p0395 N78-24099
Fundamental aspects of the aerodynamics of turbojet engine combustors
[NASA-TM-75287] p0398 N78-24142
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
Propulsion-airframe interactions predictability
p0434 N78-26079
Prediction of aerodynamic characteristics of an aircraft from a correlation of results on a calibration model tested in various large transonic tunnels
p0436 N78-26088
Development of techniques and correlation of results to accurately establish the lift/drag characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
Flight test verification of F-15 performance predictions
p0436 N78-26090
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter model employing a strake-wing concept
[NASA-TM-74071] p0437 N78-26103
A theroretical investigation of the aerodynamics of low aspect-ratio wings with partial leading-edge separation
p0449 N78-27075
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084
Development of improved 3DOF analysis capabilities in the AEDC-VKF continuous wind tunnels
[AD-A053939] p0450 N78-27088
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
Longitudinal aerodynamic characteristics of a fighter model with a close-coupled canard at Mach numbers from 0.40 to 1.20
[NASA-TP-1206] p0456 N78-27136
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands --- gas turbine engines
[NASA-CR-135307] p0459 N78-27427
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
Aerodynamic characteristics of a jet sheet vortex generator --- wind tunnel tests using thin, low aspect ratio wings
[NASA-CR-158904] p0487 N78-28054
Advanced aerodynamics and active controls technology
p0496 N78-29047
Experimental results of winglets on first, second, and third generation jet transports --- to reduce drag coefficient
p0496 N78-29048
Winglet and long duct nacelle aerodynamic development for DC-10 derivatives
p0496 N78-29049

Advanced aerodynamics and active controls for a next generation transport
p0497 N78-29052
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
Core compressor exit stage study. Volume 1: Blading design --- turbofan engines
[NASA-CR-135391] p0501 N78-29099
Aerodynamic characteristics induced on a supercritical wing due to vectoring twin nozzles at Mach numbers from 0.40 to 0.95
[NASA-TM-78746] p0543 N78-30039
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage --- conducted in the Langley V/STOL wind tunnel
[NASA-TM-74033] p0604 N78-32049
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95 --- Langley Unitary Plan wind tunnel tests
[NASA-TM-78706] p0604 N78-32050
V/STOL aerodynamic technology assessment
[AD-A054797] p0607 N78-32069
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173
Flight effects on the aerodynamic and acoustic characteristics of inverted profile coannular nozzles
[NASA-CR-3018] p0621 N78-32836
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046
Effects of wing leading-edge deflection on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration
[NASA-TM-78787] p0622 N78-33047
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055

AERODYNAMIC CHORDS
J AIRFOIL PROFILES

AERODYNAMIC COEFFICIENTS
Flow over a wing with an attached free vortex
p0059 A78-15337
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
Theoretical determination of subsonic oscillatory airforce coefficients
[ARC-R/M-3804] p0359 N78-23067
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration --- test in the Langley high speed 7- by 10-foot tunnel
[NASA-TM-78686] p0487 N78-28052
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
Maximum likelihood identification of the longitudinal aerodynamic coefficients of the EA-6B airplane in the catapult launch configuration
[AD-A054243] p0557 N78-31046

AERODYNAMIC CONFIGURATIONS
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
External drag and base pressure of fuselage tail sections of various configuration
p0128 A78-19683
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
Nearly wedge-shaped antisymmetric wing in supersonic flow
p0170 A78-22080
Aerodynamic optimization and analysis as part of the computer-aided design process
[AIAA PAPER 78-97] p0172 A78-22572

Analysis and calculation of plane skew symmetric contours of second-order smoothness --- for channel surface design
p0174 A78-22636
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
Some specific hydrodynamic and aerodynamic problems of surface-effect ships with sidewalls
p0286 A78-31126
Evaluation of airframe noise prediction methods
p0329 A78-33088
A rigid airship concept for future naval operations
[AIAA PAPER 77-1195] p0333 A78-34014
Design for flying --- Book
p0371 A78-36498
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
Minimum trimmed drag and optimum c.g. position --- center of gravity
p0473 A78-44831
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
Studies of aerodynamic technology for VSTOL fighter/attack aircraft
[AIAA PAPER 78-1511] p0516 A78-47946
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
Ground effects testing of two, three, and four jet configurations
[AIAA PAPER 78-1510] p0529 A78-49789
Close encounters of the aeroservoelastic kind --- aerodynamics, structural dynamics, and automatic flight control systems for aircraft design applications
[AIAA 78-1289] p0542 A78-50196
Practical aspects of sonic boom problems
[ICAS-PAPER-70-23] p0018 N78-10011
Splined version of FLEXSTAB: A critical analysis of alternate schemes
[NASA-CR-152030] p0020 N78-10027
Innovative aircraft design study. Task 2: Design subtask 1. Chemically fueled aircraft. Volume 2: Appendices
[AD-A044319] p0023 N78-10054
Aerodynamic and hovering control of LTA vehicles --- airship configurations
[AD-A045315] p0082 N78-12047
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
EBF noise suppression and aerodynamic penalties
[NASA-TM-73823] p0155 N78-15852
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
Effect of design changes on aerodynamic and acoustic performance of translating-centerbody sonic inlets
[NASA-TP-1132] p0236 N78-17998
Analytical study of a free-wing/free-trimmer concept --- for gust alleviation and high lift
[NASA-CR-2946] p0236 N78-18000
An annular wing
[NASA-CASE-FRC-11007-1] p0253 N78-19055
Unsteady loads due to propulsive lift configurations. Part A: Investigation of scaling laws
[NASA-CR-156120] p0300 N78-20067
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
Simplified sonic-boom prediction --- using aerodynamic configuration charts and calculators or slide rules
[NASA-TP-1122] p0301 N78-20078
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
Flight performance of the BQM-34A target drone, with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104
Simplified input for certain aerodynamic nose configurations to the Grumman quick-geometry system. A KWIKNOSE user's manual
[AD-A051425] p0394 N78-24089
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
A theoretical investigation of ground effects on USB configurations
[NASA-CR-157355] p0499 N78-29086
Aerodynamics of the new generation of combat aircraft with delta wings
p0549 N78-30106
The technology assessment of LTA aircraft systems --- hybrid airships for passenger and cargo transportation
[NASA-TM-75535] p0603 N78-32043
AERODYNAMIC DRAG
NT SUPERSONIC DRAG
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
A method for determining the induced resistance of wings with high aspect ratio in a subsonic regime
p0120 A78-19065
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
An investigation of strut-wall intersection losses
[AIAA PAPER 78-205] p0161 A78-20743
The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
The integrated shielded propeller as a drive system for general aviation aircraft
[DGLR PAPER 77-045] p0190 A78-24434
Ideal tail load for minimum aircraft drag
p0231 A78-28149
Drag formula for elongated aircraft noses
p0278 A78-29718
Supersonic transports --- drag minimization techniques
p0286 A78-31152
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
Motion of the solid phase of an aerosol at large Reynolds numbers
p0334 A78-34421
Calculation of airfoil drag
p0369 A78-36210
Minimisation of relaxation drag
p0374 A78-37423
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
An experimental investigation of the drag of thick supercritical aerofoils - A progress report
p0478 A78-45243
On the theory of drag calculation and profile optimization in shockless near free molecular flow

p0510 A78-47887
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
A minimum inductive resistance wing near the surface of the earth
[AD-A044690] p0082 N78-12042
Theoretical aspects of dromedaryfoil
[AD-A047150] p0194 N78-16023
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
A parametric investigation of the annular jet concept for obtaining afterbody drag data at transonic Mach numbers
[AD-A050891] p0345 N78-22032
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
Drag reduction for gliders
[NASA-TM-75293] p0396 N78-24116
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134

AERODYNAMIC FORCES
NT AERODYNAMIC DRAG
NT AERODYNAMIC INTERFERENCE
NT AERODYNAMIC LOADS
NT BLAST LOADS
NT GUST LOADS
NT INTERFERENCE LIFT
NT JET LIFT
NT LIFT
NT ROTOR LIFT
NT SUPERSONIC DRAG
NT WING LOADING
NT ZERO LIFT
Determination of the aerodynamic forces for an aeroelastic analysis of lifting surfaces
p0120 A78-19064
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
Normal force of a flat triangular wing in a supersonic flow
p0278 A78-29720
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
Aircraft flying performance: Principles, flight attitude, flight phases --- German book
p0480 A78-45425
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
Calculations of some unsteady transonic flows about the NACA 64A006 and 64A010 airfoils
[AD-A046178] p0137 N78-13999
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
Linearized Newtonian aerodynamics of slender inflated cones
[AD-A048695] p0254 N78-19064
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
Problems concerning high temperatures in small turbomachines
p0319 N78-21121
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052

AERODYNAMIC HEAT TRANSFER
NT HYPERSONIC HEAT TRANSFER
NT SUPERSONIC HEAT TRANSFER
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599

AERODYNAMIC HEATING
Calculated heating on the afterbody nozzle of a hypersonic aircraft concept
p0072 A78-16186
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
Economical method for calculating unsteady temperature fields in thin-walled aircraft structures
p0165 A78-20903
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
Application of a new test method and a new wind-tunnel-data processing technique to the

study of unsteady heat conduction processes
p0228 A78-27455
An experimental study of boundary layer transition on a caret wing at hypersonic speeds
p0417 A78-41029
Effect of temperature-dependent heat capacity on aerodynamic ablation of melting bodies
p0571 A78-50455
Investigation of a side force due to ablation --- reentry vehicle spin dynamic stability tests
p0571 A78-50457
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
Calculation of viscous radiant gas flows --- hypersonic reentry
p0599 A78-53556
Hypersonic flows
p0613 N78-32124

AERODYNAMIC INTERFERENCE
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
The effect of aerodynamic interference of wing and horizontal tail assembly on the critical velocity of flutter of a flight vehicle
p0126 A78-19633
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes --- for helicopters
p0126 A78-19639
Calculation of the induction of wind tunnels
p0132 A78-20277
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
Tunnel interference assessment by boundary measurements
p0284 A78-30689
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
Wake cutting experiments --- turbulent wake-blade (airfoil) interaction
p0336 A78-34843
A flutter analysis of a system of two airfoils with aerodynamic interference
p0338 A78-34968
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
Induction of subsonic wind tunnels with slight perforation
p0519 A78-48250
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
Application of hypersonic favorable aerodynamic interference concepts to supersonic aircraft
[AIAA PAPER 78-1458] p0591 A78-52042
On the nonstationary boundary layer with self-induced pressure at transonic external stream velocities
p0591 A78-52043
Aerodynamic interference in a system of two harmonically oscillating airfoils and its influence on flutter
p0019 N78-10016
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
Aerodynamic interference effects on tilting proprotor aircraft --- using the Green function method
[NASA-CR-152053] p0092 N78-13007
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
The interference problem of the oscillating fuselage near ground
p0204 N78-17008
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
Wind-tunnel testing of VTOL and STOL aircraft
[NASA-TM-78750] p0543 N78-30040

AERODYNAMIC LIFT
U LIFT

AERODYNAMIC LOADS
NT BLAST LOADS
NT GUST LOADS
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
Use of the vorticity method in computing the aerodynamic characteristics of a thin wing in a steady supersonic flow
p0126 A78-19626
Computation of inductive velocity in the plane of a lightly loaded lifting propeller
p0127 A78-19658
Turbulent boundary layer on a moving surface
p0163 A78-20850
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
Rational arrangement of the structural and load-bearing elements of the wing with allowance for certain aerodynamic requirements
p0167 A78-20984
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
Prediction of the unsteady airloads on oscillating lifting systems and bodies for aeroelastic analyses
p0333 A78-34087
Deformation curve of rotary airfoil blades
p0386 A78-39540
On the linear superposition of aerodynamic forces on wings in periodic gusts
p0510 A78-47869
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673
Simple numerical model for calculation of entry vehicle trim response
p0585 A78-51284
The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013
Calculation of horizontal tail loads in maneuvering flight
[DLR-IB-536-76/4] p0137 N78-14003
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
Movement of a tilted wing near a screen
[AD-A045920] p0144 N78-14347
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TN-D-8235] p0194 N78-15999
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2 --- tabulated test results

[NASA-CR-2915] p0203 N78-16998
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
Calculation of the horizontal tail loads from elevator actuation
[DLR-IB-536-76/4] p0238 N78-18011
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis --- NASTRAN
[AD-A048840] p0254 N78-19065
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
Calculation of unsteady airloads on oscillating three-dimensional wings and bodies
p0346 N78-22038
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
Aerodynamic phenomena in an oscillating transonic NCA airfoil cascade including loading effects
p0347 N78-22066
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
Wind-tunnel measurements of aerodynamic load distribution on an NASA supercritical-wing research airplane configuration
[NASA-TM-X-2469] p0393 N78-24079
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Airframe response to separated flow
p0438 N78-26116
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
Development and flight evaluation of active controls in the L-1011 --- including wing load alleviation and stability augmentation
p0496 N78-29051
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity --- rotor precession in steam turbines
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
A calculator program for analyzing airloads on a wing of arbitrary planform and camber in subsonic flow
[AD-A054180] p0545 N78-30058
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface --- YP-12A ventral fins
p0605 N78-32058
Influences of sway braces and mounting gaps on the static aerodynamic loading of external stores
[AD-A054963] p0607 N78-32068
Technical evaluation report on the Fluid Dynamics Panel Symposium on Prediction of Aerodynamic Loading
[AGARD-AR-125] p0608 N78-32074
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392
Effect of aircraft loading program modifications on the fatigue life and damage cumulation. Part 1: Effect of load peaks in case of central hole sheet specimens
[TAE-334-PT-1] p0616 N78-32462
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
AERODYNAMIC MOMENTS
U STABILITY DERIVATIVES
AERODYNAMIC NOISE
Noise of aerodynamic and, in particular, turbojet origin
[ONERA, TP NO. 1977-161] p0075 A78-16618
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
EBF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
Aerodynamic noise of gliders
p0328 A78-32971
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568
Azimuthal decomposition of the power spectral density of jet noise
p0375 A78-37532
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Noise from separated flow of flat plate
p0577 A78-50622
Broadband noise in axial-fan blade cascade
p0579 A78-50650
Minimum on-axis noise for a propeller or helicopter rotor

p0590 A78-51949
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
Acoustic investigation of upper surface blown flaps
p0092 N78-13005
An empirical model for inverted-velocity-profile jet noise prediction
[NASA-TM-73838] p0098 N78-13061
A study of acoustic disturbances and means of suppression in ventilated transonic wind tunnel walls
[AD-A045347] p0100 N78-13080
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
Acoustic interference effects and the role of Helmholtz number in aerodynamic noise
[DLR-IB-257-77/11] p0251 N78-18878
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132
A method for calculating externally blown flap noise
[NASA-CR-2954] p0311 N78-20920
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673

AERODYNAMIC STABILITY
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
Theory of dolphin-style sailplane flight and the principles of dynamic flight. II
p0278 A78-29672
A theoretical technique for analyzing aeroelastic stability of bearingless rotors
[AIAA 78-503] p0279 A78-29805
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270
Method for calculating the longitudinal, lateral, and cross aerodynamic derivatives of a flight vehicle at subsonic speeds
p0342 A78-35905
The computation of the unsteady aerodynamics of bodies near a ground surface
p0373 A78-37408
Evolution of aircraft design through the CCV concept
p0416 A78-40868
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
Some nonlinear effects in stability and control of wing-in-ground effect vehicles
p0474 A78-44836
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
Dynamic stability of a helicopter carrying a suspended payload
[AIAA 78-1335] p0483 A78-46533
Flying qualities of an aircraft with strong lateral-directional coupling --- application to space shuttle stability control
[AIAA 78-1361] p0484 A78-46550
Close encounters of the aeroservoelastic kind --- aerodynamics, structural dynamics, and automatic flight control systems for aircraft design applications
[AIAA 78-1289] p0542 A78-50196
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
[AD-A043543] p0029 N78-10107
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Wind tunnel study of an active flutter suppression system --- wing with external tank
p0046 N78-11974
Amplification of distortions in an axial compressor stage
p0046 N78-11983
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Aerodynamic and hovering control of LTA vehicles --- airship configurations
[AD-A045315] p0082 N78-12047
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Stability of helicopter slung loads
[ARL/AERO-NOTE-364] p0196 N78-16040
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
Circulation control airfoil study --- wind tunnel stability tests
[AD-A048677] p0237 N78-18005
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
Separation problems encountered by aircraft designers CSS Div. des Etudes Avancees.
p0249 N78-18377
Design and evaluation of a side force generator modification for the XBQM-1 remotely piloted vehicle
[AD-A048901] p0260 N78-19122
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140

Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
Unsteady aerodynamics --- conference emphasizing numerical analysis of three dimensional flows
[AGARD-CP-227] p0345 N78-22033
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
Calculation of unsteady airloads on oscillating three-dimensional wings and bodies
p0346 N78-22038
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
Development and flight evaluation of active controls in the I-1011 --- including wing load alleviation and stability augmentation
p0496 N78-29051
F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131
Aerodynamic stability testing with magnetically suspended models
p0612 N78-32108
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121

AERODYNAMIC STALLING
A new analysis method for determination of FAA stall speed
p0124 A78-19440
The prediction of two-dimensional airfoil stall progression
[AIAA PAPER 78-155] p0160 A78-20709
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
Surge responsibility and range characteristics of centrifugal compressors
p0577 A78-50616
Research on the flutter of axial-turbomachine blading
[AD-A047086] p0194 N78-16021
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
The stall problem
p0204 N78-17006
Calculation of the lift of partially-stalled wings
[NAL-TR-498T] p0252 N78-19054
Dynamic stall of an oscillating airfoil
p0346 N78-22055
Prediction of unsteady separated flows on oscillating airfoils
p0494 N78-28409
Simulation study of the oscillatory longitudinal motion of an airplane at the stall
[NASA-TP-1242] p0552 N78-30141
Dynamic stall: An example of strong interaction between viscous and inviscid flows
[NASA-TM-75447] p0615 N78-32384

AERODYNAMIC VEHICLES
U AIRCRAFT

AERODYNAMICS
NT AEROTHERMODYNAMICS
NT ROTOR AERODYNAMICS
Recent developments in numerical solutions for equations of the boundary layer in laminar and turbulent flow
p0118 A78-19030
Numerical study of transonic profiles
p0120 A78-19061
Boundary layers in dissipative media
p0170 A78-22091
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Theory of dolphin-style glider flight and principles of dynamic flight. I
p0231 A78-28195
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
Environmental aerodynamics --- Book
p0332 A78-33802
Form of free vortices of a wing of finite span
p0335 A78-34444
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
Factorization methods in hydroaeromechanics --- Russian book
p0378 A78-37887
Laser velocimeter for wind tunnel measurements
p0378 A78-37979
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833
Thirty years of fluid dynamics
p0585 A78-51280
Computation of two-dimensional potential flow using elementary vortex distributions
p0590 A78-51948
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
A survey of computational aerodynamics in the United States
[NASA-SP-394] p0033 N78-11007
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
Evaluation of a power-augmented-ram wing operating free in heave and pitch over water
[AD-A045428] p0093 N78-13021
Digital spectral analysis and filtering of experimental aerodynamic data
[SAND-77-0225] p0093 N78-13022

The 4m x 2m industrial aerodynamics wind tunnel
[OUEL-1188/77] p0100 N78-13085
Considerations in the design of tip-coupled air-transport systems
[NASA-TM-78645] p0147 N78-15001
An introduction to the aerodynamics of flight dynamics
[RAE-TM-AERO-1710] p0152 N78-15057
Project SQUID
[AD-A047076] p0199 N78-16056
Unsteady aerodynamic modeling and active aeroelastic control
p0199 N78-16061
Numerical aerodynamic simulation facility. Preliminary study extension
[NASA-CR-152107] p0252 N78-19051
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
An aerodynamic investigation of a forward swept wing
[AD-A048898] p0254 N78-19069
Static stability of vehicles which use the lifting force of airfoils
[AD-A049069] p0255 N78-19074
The dynamics of non spherical particles --- aerodynamic translational mobility of cubes and cylinders
[AD-A047144] p0256 N78-19080
Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-19778
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
Remarks on future computational aerodynamics requirements --- government/industry relations
p0269 N78-19785
Future requirements and roles of computers in aerodynamics
p0269 N78-19786
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Computational aerodynamics requirements in conjunction with experimental facilities --- wind tunnel test data
p0269 N78-19788
Viscous flow simulations in VTOL aerodynamics --- finite difference technique
p0269 N78-19791
Viscous flow simulation requirements --- of aerodynamic interest
p0270 N78-19793
Prospects for computational aerodynamics --- integro-differential formulation
p0270 N78-19795
Finite element concepts in computational aerodynamics
p0270 N78-19801
Specialized computer architectures for computational aerodynamics
p0270 N78-19814
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration, task 3
[NASA-CR-145192] p0305 N78-20112
Numerical study of transonic flow over oscillating airfoils using the full potential equation
[NASA-TP-1120] p0313 N78-21055
Studies in experimental aerodynamics --- subsonic velocities
[NASA-TT-F-17158] p0450 N78-27086
A Mach line panel method for computing the linearized supersonic flow over planar wings
[NASA-CR-152126] p0450 N78-27087
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911

AEROELASTICITY

NT AEROTHERMOELASTICITY

Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
Analysis of lateral dynamic stability of an airplane with deformable control systems II - Numerical analysis
p0108 A78-17642
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
Determination of the aerodynamic forces for an aeroelastic analysis of lifting surfaces
p0120 A78-19064
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures --- aircraft structural analysis
p0127 A78-19656
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
Taking into account the effect of elasticity of the structure on the longitudinal short-period motion of an aircraft
p0164 A78-20882
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
Rational arrangement of the structural and load-bearing elements of the wing with allowance for certain aerodynamic requirements
p0167 A78-20984
Why the flexible wing. II --- for glider design
p0176 A78-23058
Continuation and direct solution of the flutter equation
p0221 A78-25703
A theoretical technique for analyzing aeroelastic stability of bearingless rotors
[AIAA 78-503] p0279 A78-29805
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
Prediction of the unsteady airloads on oscillating lifting systems and bodies for aeroelastic analyses
p0333 A78-34087
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Deformation curve of rotary airfoil blades
p0386 A78-39540
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
Investigation of turbine stages with radial blades
p0467 A78-43643
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
Assessment of dynamic coordinate alignment for elastic aircraft --- flight control Kalman filter estimates
p0538 A78-49987

Close encounters of the aeroservoelastic kind --- aerodynamics, structural dynamics, and automatic flight control systems for aircraft design applications
[AIAA 78-1289] p0542 A78-50196
Mathematical model of vortex-excited oscillations of thin, weakly damped structures
p0583 A78-51153
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
[NASA-TM-78439] p0095 N78-13037
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
Unsteady aerodynamic modeling and active aeroelastic control
p0199 N78-16061
Outline of aeroelastic phenomena
p0204 N78-17003
Significance of structural nonlinearities from the structural dynamics and aeroelasticity point of view
p0204 N78-17005
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-P-664] p0207 N78-17048
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046

AEROLOGY
The role of meteorology in helicopter icing problems
p0376 A78-37712
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189

AEROMAGNETO FLUTTER
U FLUTTER

AERONAUTICAL ENGINEERING
Back to the drawing board --- management of design engineering
p0126 A78-19548
Recent progress and technical and economic outlooks in the processing of materials for airframe elements
p0221 A78-26036
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
Taking a new perspective on design --- aeronautical engineering curricula
p0335 A78-34643
Application of modern methods in civil aircraft construction
p0382 A78-38808
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
The potential of advanced technology for aircraft structures /10th J. D. North Memorial Lecture/
p0570 A78-50400
A survey of computational aerodynamics in the United States
[NASA-SP-394] p0033 N78-11007
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
The role of engineering in the flight equipment purchasing process
[NASA-CR-156839] p0213 N78-17915
Separation problems encountered by aircraft designers CSS Div. des Etudes Avancees.
p0249 N78-18377
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Aeronautical knowledge, selected articles
[AD-A051710] p0367 N78-23986
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
Bibliography of Lewis Research Center technical publications announced in 1977
[NASA-TM-78918] p0496 N78-28986
Modifications and improvements in a structural optimization scheme based on an optimality criterion
[AD-A055941] p0609 N78-32088
Description of a model for evaluating operational performance of communications system
[AD-A057199] p0632 N78-33313

AERONAUTICAL SATELLITES
NT AEROSAT SATELLITES

AERONAUTICS
Projected needs of US Army Aviation
p0261 N78-19127
Aviation weather service requirements, 1980 - 1990
p0267 N78-19713
Overview of NASA/Marshall Space Flight Center's program on knowledge of atmospheric processes
p0267 N78-19714
An overview of aviation weather services
p0267 N78-19715
Airplane design for gusts
p0267 N78-19717
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718
NASA's aviation safety research and technology program
p0268 N78-19719

AEROSAT SATELLITES
Experimental analysis and selection of airborne antennas for aircraft-to-satellite communication systems
p0122 A78-19140
Aerosat communication management
p0365 N78-23307

AEROSOLS
NT FOG
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145
Fire detection devices --- for aircraft cabins
p0175 A78-22900
Airborne sampling system for plume monitoring
p0418 A78-41280

AEROSPACE ENGINEERING
NT AERONAUTICAL ENGINEERING
Designing to cost /DTC/LCC/
p0110 A78-17894
A program for the interactive design of wing structures
p0120 A78-19063
Back to the drawing board --- management of design engineering
p0126 A78-19548
Preferred electrical connectors for aerospace vehicles and associated equipment

[SAE ARP 1308A] p0471 A78-44688
Teaching design at all levels --- in aerospace engineering curricula
[AIAA PAPER 78-1455] p0511 A78-47906
The use of the AIAA-Bendix Design Competition in aerospace design courses
[AIAA PAPER 78-1488] p0514 A78-47931
The value of aerospace design synthesis courses as viewed by aerospace professionals
[AIAA PAPER 78-1493] p0515 A78-47934
Aerospatiale is ready to develop a convertiplane with tethering rotors
[NASA-TM-75038] p0206 N78-17042
Bibliography of Lewis Research Center technical publications announced in 1977
[NASA-TM-78918] p0496 N78-28986
Weldbraze airframe components
[AD-A054042] p0504 N78-29457
Lighter than air vehicles. Citations from the engineering index data base
[NTIS/PS-78/0410/7] p0607 N78-32073
From space on a parachute
[NASA-TM-75577] p0631 N78-33140
CAD/CAM data management needs, requirements and options
p0635 N78-33778

AEROSPACE ENVIRONMENTS
The external magnetic field environment
p0036 N78-11033

AEROSPACE INDUSTRY
NT AIRCRAFT INDUSTRY
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
New production methods gain --- in engine manufacturing for U.S. aerospace industry
p0598 A78-53239
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
Remarks on future computational aerodynamics requirements --- government/industry relations
p0269 N78-19785

AEROSPACE MEDICINE
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046

AEROSPACE SYSTEMS
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
Lasers in aviation --- Russian book on aerospace applications
p0474 A78-45067
The design process --- computer aided design for complex aerospace systems
[AIAA PAPER 78-1483] p0514 A78-47928
NAECON '78; Proceedings of the National Aerospace and Electronics Conference, Dayton, Ohio, May 16-18, 1978. Volumes 1, 2 & 3
p0529 A78-49851
Spacelab hardware update
[AAS PAPER 78-005] p0599 A78-53614
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787

AEROSPACE TECHNOLOGY TRANSFER
Noise research at DFVLR with relevance for industry
p0115 A78-18505
Where aerospace can serve afresh - Paths to energy independence
p0177 A78-23420
Preliminary QCSEE program test results
[NASA-TM-73732] p0151 N78-15042

AEROSPACE VEHICLES
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
RIM: A prototype for a relational information management system
p0635 N78-33785

AEROSTATS
U AIRSHIPS

AEROTHERMOCHEMISTRY
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508

AEROTHERMODYNAMICS
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies
p0186 A78-24096
The fluid dynamics of rarefied molecular flow over convex bodies - A new theory and applications
p0229 A78-27588
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
Supersonic aerothermal testing - A new requirement
[AIAA 78-773] p0294 A78-32333
Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
Investigation of turbine stages with radial blades
p0467 A78-43643
Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures
p0580 A78-50780
A computer-aided method of calculating temperature fields in turbine disks
p0581 A78-50796
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309

AEROTHERMOELASTICITY
Optimal control synthesis in distributed systems with incomplete information --- noting aircraft applications
p0518 A78-48215
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935

AFCS (CONTROL SYSTEM)
U AUTOMATIC FLIGHT CONTROL

AFTERBODIES
Calculated heating on the afterbody nozzle of a hypersonic aircraft concept
p0072 A78-16186
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
A parametric investigation of the annular jet concept for obtaining afterbody drag data at transonic Mach numbers
[AD-A050891] p0345 N78-22032

AFTERBURNERS
U AFTERBURNING

AFTERBURNING
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Low frequency augmentor instability study --- afterburning effects in turbofan engines
[AIAA PAPER 78-996] p0464 A78-43543
Aircraft afterburner catalytic flame stabilization
p0572 A78-50570
Altitude test of several afterburner configurations on a turbofan engine with a hydrogen heater to simulate an elevated turbine discharge temperature
[NASA-TP-1068] p0041 N78-11106
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066

Low frequency combustion instability in augmentors
p0321 N78-21138
AGC (CONTROL)
U AUTOMATIC GAIN CONTROL
AGGREGATES
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
AGING (MATERIALS)
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces --- aging of airframe materials
[AD-A045277] p0096 N78-13049
AGREEMENTS
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
AGRICULTURE
An economic and technical perspective of the turboprop engine in Ag-aviation
p0375 A78-37536
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
AH-64 HELICOPTER
The attack helicopter Hughes YAH-64
p0003 A78-12035
YAH-64 advanced attack helicopter design tradeoffs
[SAE PAPER 770950] p0178 A78-23801
Black Hawk, Lamps and AAH
p0225 A78-26533
Flight controls of Army/Hughes YAH-64 advanced attack helicopter
[AIAA 78-1237] p0540 A78-50160
AILERONS
Effect of a nonconstant C/m-alpha/ on the stability of rolling aircraft
p0071 A78-16180
Calculation of the flow past a vibrating airfoil section in transonic gas flow
p0127 A78-19669
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
Development of advanced composite structures
p0448 N78-27062
AIR
NT COMPRESSED AIR
NT HIGH TEMPERATURE AIR
AIR BLASTS
U AERIAL EXPLOSIONS
AIR BREATHING ENGINES
NT DUCTED FAN ENGINES
NT GAS TURBINE ENGINES
NT J-85 ENGINE
NT JET ENGINES
NT RAMJET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
NT TF-41 ENGINE
NT TURBOFAN ENGINES
NT TURBOJET ENGINES
NT TURBOPROP ENGINES
Trends and research opportunities in airbreathing propulsion
[AIAA PAPER 78-44] p0157 A78-20652
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Proceedings of the Workshop on Engine-Airframe Integration Short-Haul Aircraft
[AD-A053417] p0499 N78-29088
AIR CARGO
NT AIR MAIL
Protective equipment for cargo transport in passenger cabins
p0051 A78-13501
An appreciation of the dynamic problems associated with the external transportation of loads from a helicopter - State of the art
p0114 A78-18429
Deployment forces in towing systems --- by aircraft
p0188 A78-24365
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
Minimum requirements for future wide-body aircraft cargo systems and compartments /intermodal/
[SAE ARP 1395] p0471 A78-44691
Design concepts for future air freighters
p0592 A78-52450
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
Gondola system for helicopter transport of external cargo
[AD-A047560] p0306 N78-20120
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061
AIR COOLING
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Transient expansion of the components of an air seal on a gas turbine disc
[SAE PAPER 770974] p0179 A78-23818
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Optimization of the cooling system of an air-cooled internal combustion engine
p0419 A78-41510
Temperature profiles of rotating cooled blade --- via infrared photography of air-cooled turbine blades
p0573 A78-50581
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Energy economy with high temperature gasturbine
p0575 A78-50604
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
A theoretical and experimental analysis of the influence of coolant discharge from perforated turbine blades on their aerodynamic behavior
p0580 A78-50777
Effect of endwall cooling on secondary flows in turbine stator vanes
p0041 N78-11098
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data

p0322 N78-21148
Emergency and microfog lubrication and cooling of bearings for Army helicopters
[NASA-CR-135195] p0459 N78-27429
AIR CURRENTS
NT MERIDIONAL FLOW
NT VERTICAL AIR CURRENTS
The 4m x 2m industrial aerodynamics wind tunnel
[OUEL-1188/77] p0100 N78-13085
AIR CUSHION VEHICLES
U GROUND EFFECT MACHINES
AIR DEFENSE
Solid-state active RF missile seeker - Future role in all-weather systems
p0054 A78-14935
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
Simulation tests of anti-flak profiles --- aircraft flight optimization for ground attack mission
p0290 A78-31951
Early warning aircraft
p0342 A78-35898
Modular target acquisition and designation systems
p0536 A78-49954
AIR DROP OPERATIONS
Current trends in the aerial application of fire retardants
p0425 A78-42512
AIR DUCTS
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143
AIR FILTERS
Application of self-cleaning air cleaners to aircraft and vehicular gas turbines
p0578 A78-50633
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
AIR FLOW
NT AIR CURRENTS
NT MERIDIONAL FLOW
NT VERTICAL AIR CURRENTS
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes --- for high temperature gas turbine blades
p0573 A78-50578
Vortex dynamics
p0582 A78-51051
The theory of fabric porosity as applied to parachutes in incompressible flow
p0586 A78-51466
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029
Study on stage of centrifugal compressor with air turbine
[AD-A045436] p0101 N78-13452
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
AIR FREIGHT
U AIR CARGO
AIR INLETS
U AIR INTAKES
AIR INTAKES
NT ENGINE INLETS
NT SUPERSONIC INLETS
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
Calculation of the mean flow characteristics at the inlet to the air intake located under a delta wing
p0165 A78-20895
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649
AIR JETS
Decay and modification of trailing vortex
p0230 A78-27908
The mean velocity field of unsteady subsonic air jets
p0374 A78-37417
AIR LAUNCHING
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Shuttle carrier aircraft flight tests
p0234 A78-28464
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched missiles
p0534 A78-49929
AIR MAIL
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096
AIR NAVIGATION
NT ALL-WEATHER AIR NAVIGATION
NT AREA NAVIGATION
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246
An overview of enroute radio navigation services for civil aviation
[AIAA 77-1509] p0007 A78-12255
JTIDS - An update --- Joint Tactical Information Distribution System
[AIAA 77-1521] p0008 A78-12262
A computer controlled aircraft collision avoidance system
[AIAA 77-1524] p0008 A78-12264
Experience with the VOR navigation system in the German Democratic Republic. IV
p0051 A78-13502
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
Keeping pace with avionics innovations --- data processing in navigation and tracking
p0069 A78-15712
The ITC PHOTNAV system --- for cadastral aerial survey photography operations
p0074 A78-16536
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
Navigating Canada, to the end of the twentieth century
p0111 A78-17907
Omega Navigation System - Present status and plans 1977-1980
p0112 A78-17916
New generation of radio navigation equipment
p0115 A78-18665
Testing a modern strike aircraft navigation system
p0175 A78-22852
Navigation procedure - Present systems and development trends
[DGLR PAPER 77-018] p0189 A78-24411

Principles and simulation of JTIDS relative navigation --- Joint Tactical Information Distribution System
p0222 A78-26156
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523
Observability criteria for nonlinear dynamic systems subjected to multiparameter measurements --- noting air navigation applicability
p0274 A78-29089
Benefits of strapdown over gimbal INS systems for aircraft application
p0282 A78-30253
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
Alignment of inertial navigation units on the Super-Etendard aircraft carrier
p0342 A78-35895
System requirements for transition from enroute to approach guidance
p0370 A78-36453
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
The distance measurement procedure DME. I --- for air navigation
p0469 A78-44198
Method of calculating the landmark density of aeronautical charts
p0475 A78-45124
RNAV - Corporate operators set the pace
p0509 A78-47424
Communication and navigation antennas for aircraft --- Russian book
p0522 A78-48523
The Omega radionavigation system comes to the Pacific Ocean area
p0525 A78-49660
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched missiles
p0534 A78-49929
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
Real-time simulators for augmented inertial navigation systems
p0537 A78-49967
Reliability of inertial navigation systems --- for military and commercial aircraft
p0537 A78-49968
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
A parametric analysis of TERCOM false fix probability --- TERrain COntour Matching
p0539 A78-49997
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
Current and future navigation and landing systems
p0569 A78-50265
New organization of air traffic over the North Atlantic region
p0588 A78-51599
The Navy's approach /Air traffic control/
p0595 A78-52969
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
Applications of Advances in Navigation to Guidance and Control
[AGARD-CP-220] p0314 N78-21071
The analysis of operational mission execution: An assessment of low-altitude performance, navigation accuracy and weapon delivery performance
p0433 N78-26070
Experimental determination of the navigation error of the 4-D navigation, guidance, and control systems on the NASA B-737 airplane
p0433 N78-26071
Navigation system aspects of low altitude flight
p0434 N78-26073
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105
TRSB microwave landing system demonstration program at Brussels, Belgium
[AD-A054298] p0546 N78-30075

AIR POLLUTION
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
Design and operation of an airborne air quality measurement system
p0107 A78-17575
Preliminary QCSEE program - Test results --- Quiet Clean Short-haul Experimental Engine
[SAE PAPER 771008] p0181 A78-23840
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
Remote sensing of aircraft wake vortex movement in the airport environment --- aircraft exhaust products tracking
[APCA PAPER 77-41,4] p0220 A78-25385
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
Gas turbine engine emissions - Problems, progress and future
p0524 A78-49336
Concorde emissions at Dulles International Airport - Results of measurements
p0597 A78-53050
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Better marks on pollution for the SST
p0018 N78-10013
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
The problem of pollution for the SST
[ICAS-PAPER-74-29] p0018 N78-10015
Aircraft engine emissions --- conference
[NASA-CP-2021] p0038 N78-11063
Emissions reduction technology program
p0039 N78-11065
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
Pollution reduction technology program for turboprop engines
p0039 N78-11069
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070
Summary of emissions reduction technology programs
p0039 N78-11071
Emissions control for ground power gas turbines
p0039 N78-11072
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Global atmospheric sampling program
p0040 N78-11076
Stratospheric cruise emission reduction program
p0040 N78-11077
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065

Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Gas turbine engine emission reduction technology program
p0447 N78-27058
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
The High Altitude Pollution Program
[UCRL-50042-77] p0617 N78-32601
Air pollution emission factors: A bibliography with abstracts
[NTIS/PS-78/0548/4] p0617 N78-32604

AIR QUALITY
Design and operation of an airborne air quality measurement system
p0107 A78-17575
Simulation of airport air quality by box photochemical and Gaussian models
p0216 A78-25033
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
Aircraft emission factors
[PB-275067/7] p0250 N78-18595
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099

AIR SAMPLING
Design and operation of an airborne air quality measurement system
p0107 A78-17575
Subisokinetic sampling errors for aircraft turbine engine smoke probes
p0379 A78-38575
Airborne sampling system for plume monitoring
p0418 A78-41280

AIR SEA INTERACTIONS
U AIR WATER INTERACTIONS

AIR TO AIR MISSILES
NT SPARROW 3 MISSILE
Bank-to-turn /BIT/ autopilot technology --- for missiles
p0534 A78-49927
Captive carriage vibration of air-to-air missiles on fighter aircraft --- F-15 flight measurements
p0587 A78-51470
Optimal missile evasion
[AD-A053267] p0439 N78-26135
An extended Kalman filter fire control system against air-to-air missiles, volume 2
[AD-A055637] p0610 N78-32091

AIR TO AIR REFUELING
Tomorrow's tanker --- air-air refueling aircraft
p0077 A78-17099
Guided drogue flight test report
[AD-A049164] p0254 N78-19067

AIR TO AIR ROCKETS
U AIR TO AIR MISSILES

AIR TO SURFACE MISSILES
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
Strapdown seeker guidance for tactical weapons
p0534 A78-49928

AIR TRAFFIC
Radiation safety in high-altitude air traffic
p0071 A78-16184
A new approach to future airport planning
p0134 A78-20482
Expansion potential for the local service air carrier
p0376 A78-37539
Trailing vortices. II
p0507 A78-47172
The legal basis for security measures in air traffic
p0589 A78-51823
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
Uplink coverage measurements in the Los Angeles area for passive BCAS --- collision avoidance
[AD-A048288] p0239 N78-18027
Air traffic safety in the airport near range
[TUBS/SFB58/M4] p0304 N78-20103
Airport activity statistics of certificated route air carriers
[AD-A052728] p0395 N78-24102
Air traffic congestion and capacity. A bibliography with abstracts
[NTIS/PS-78/0598/9] p0609 N78-32085

AIR TRAFFIC CONTROL
NT RADAR APPROACH CONTROL
Interferometer design for elevation angle estimation --- radar detection in ATC
p0001 A78-10304
Avionics for the discrete address beacon system /DABS/
[AIAA 77-1511] p0007 A78-12256
The effect of radar disturbances on aircraft runway arrival time in a four-dimensional navigation terminal approach
[AIAA 77-1512] p0007 A78-12257
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
The role of cockpit simulators in the integration of pilot/controller ATC system related avionics and procedures
[AIAA 77-1516] p0010 A78-12284
Aircraft separation in the controlled airspace of the United States --- ATC systems
p0059 A78-15250
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
AIRTRACK - A system for air traffic control
p0073 A78-16376
The technology for the automatic tracking of targets of surveillance and secondary radar
p0073 A78-16377
Preventing zero-growth air transportation
p0107 A78-17569
Satellite-aided ATC system concepts employing the Navstar Global Positioning System
[M77-59] p0111 A78-17903
Remote maintenance monitor systems --- for air navigation equipment
p0111 A78-17911
A single site passive collision avoidance system
p0111 A78-17912
The Interim Standard Microwave Landing System
p0112 A78-17915
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
Mission management in the airport vicinity --- digital flight control for terminal maneuvering area
[DGLR PAPER 77-037] p0190 A78-24427
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
Strategic positioning and traffic regulation in the terminal zone
p0217 A78-25150
An adaptive interference cancellation system for elimination of co-located interference signals --- for ATC sites
p0227 A78-27041
The year for shaping a digital operations R&D program --- for ATC

p0231 A78-28218
Automatic airspace --- automatic flight control of terminal configured vehicle for ATS
p0273 A78-28834
A method of calculating ILS approach surfaces
p0275 A78-29207
Air traffic control and energy conservation in air operations
p0288 A78-31314
Ground radar - Vital tool or luxury --- for aircraft surface movements
p0289 A78-31869
Terminal-area flight experience with the NASA Terminal Configured Vehicle
p0291 A78-31972
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
The strategy of traffic regulation in Western Europe
p0334 A78-34374
By accident or design --- ATC collision avoidance systems
p0334 A78-34375
Concerning the logical comparison of ATC separation standard assessment models
p0370 A78-36455
Fully-automated, pilot-monitored air traffic control
p0373 A78-37155
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
The new system for processing and presenting radar data in the Air Traffic Control Center of Barcelona
p0383 A78-38997
A relative motion analysis of horizontal collision avoidance
p0387 A78-39674
Display of radar information by the strata method
p0426 A78-42774
User delay cost model for a terminal control area
p0427 A78-43039
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
ATC system current and projected problems and recommended solutions - An airline pilot's view
[AIAA PAPER 78-1539] p0482 A78-46511
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
Air traffic control in the terminal area - Use of a simulation technique for the definition of an operative model
p0527 A78-49733
Aircraft guidance and flight safety - Current and future problems for research and industry
p0569 A78-50263
Improved safety in air transportation through the extension and automation of flight safety systems
p0569 A78-50264
Digital flight control system - Advanced technology of flight control
p0569 A78-50266
Strategic or tactical air traffic control
p0570 A78-50447
Airborne equipment for all weather operations
p0570 A78-50448
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
The short-haul jet designed with ATC in mind
p0587 A78-51516
Airline contributions to better air traffic control
p0587 A78-51518
New organization of air traffic over the North Atlantic region
p0588 A78-51599
Stochastic properties of conflict frequency at multiple connected air route intersections
p0590 A78-51945
Air Traffic Control Association, Annual Meeting, 22nd, Las Vegas, Nev., October 10-13, 1977, Proceedings and Supplement
p0594 A78-52951
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
The helicopter operators' viewpoint --- airspace operational environments and requirements
p0594 A78-52955
Safety and communication requirements in air traffic control today
p0594 A78-52956
Airport traffic surveillance
p0594 A78-52957
The ARTS III Umbrella - Concepts and applications --- for collecting and distributing aircraft positional data within ATC radar coverage areas
p0594 A78-52958
A more fully Automated En Route ATC system
p0595 A78-52959
The Central Flow Control /CFC/ system --- for Air Traffic Control System Command Center
p0595 A78-52960
Management of software development for advance ATC systems
p0595 A78-52961
Moving target detector /MTD/ radar system
p0595 A78-52963
Development of a breadboard system for recording ATC displays
p0595 A78-52964
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
Aircraft developments that hold promise for increased compatability with an advanced ATC system
p0595 A78-52967
A system concept of metering and spacing --- for aircraft landing approach
p0595 A78-52968
The Navy's approach /Air traffic control/
p0595 A78-52969
Overview of potential ATC developments
p0596 A78-52970
Modernization program for the Iranian National Airspace System
p0596 A78-52971
Concept and future plans for automation of air traffic control in the Federal Republic of Germany
p0596 A78-52972
Preparing today, to meet the ATC challenges of tomorrow --- for civil aircraft operations in Taiwan
p0596 A78-52973
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
The direct access radar channel - A distributed minicomputer system
p0596 A78-52976
Area navigation - Fast-time/real-time simulations in a high-altitude center environment
p0596 A78-52977
ATC in the year 2000
p0596 A78-52978
What's new in controller displays - Electronic flight strips and a color plan view display
p0597 A78-52979
Preliminary Candidate Advanced Avionics System (PCAAS) --- reduction in single pilot workload during instrument flight rules flight
[NASA-CR-152026] p0024 N78-10061
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
Simulation model for air traffic control communications
[AD-A044256] p0037 N78-11045
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
DABS coverage
[AD-A045940] p0139 N78-14022

A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Computer simulations of ATCRBS processing equipment for use with the aims and transient effects performance prediction models
[AD-A046758] p0139 N78-14025
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
Terminal area forecast 1978-1988
[AD-A046543] p0195 N78-16027
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028
Intermittent positive control. Phase 1: Operational test and evaluation
[AD-A047249] p0195 N78-16030
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
Airport surface traffic control visual ground aids engineering and development plan
[AD-A038153] p0196 N78-16037
Airport surface traffic control TAGS planning alternatives and cost/benefit analysis
[AD-A037790] p0196 N78-16038
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
Development of a discrete address beacon system --- testing monopulse beacon antennas
[AD-A048247] p0206 N78-17036
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
A hardware implementation of the ATCRBS reply processor used in DABS
[AD-A047622/6] p0257 N78-19090
The impact of a proposed active BCAS on ATCRBS performance in the Washington, D. C., 1981 environment
[AD-A048589/6] p0303 N78-20099
Cockpit displayed traffic information study, part 2
[NASA-CR-156115] p0304 N78-20102
Air traffic safety in the airport near range
[TUBS/SPB58/M4] p0304 N78-20103
Simulation and development possibilities of the manual control concept in the near range and control zone
p0304 N78-20104
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Improved aircraft tracking using maneuver statistics enroute and in the terminal area
p0316 N78-21087
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
Proposed methods and criteria for ATCRBS PRF assignment
[AD-A050050/4] p0360 N78-23074
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
Ionospheric effects on satellite navigation and air traffic control systems
p0365 N78-23325
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
Use of simulation techniques in the problem of air traffic control
[QUAD-CALC-ELETT-21] p0395 N78-24111
Feasibility study for simulation of an airport tower control environment
[AD-A051174] p0400 N78-24154
Project Plan: Tower automated ground surveillance system development program
[AD-A051621] p0400 N78-24155
Problems in world-wide standardization of the units of height measurement
[AD-A051150] p0402 N78-24385
Perspective radar display system: TV-like presentation on CRT provides higher lateral position and lateral motion sensitivity than a PPI
[AD-A052342] p0402 N78-24418
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071
Accurate timing in landings through air traffic control
p0433 N78-26067
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0433 N78-26069
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
Problems in world-wide standardization of the units of altitude measurement
[PB-277982/5] p0454 N78-27119
Satellite communications mode simulation tests for oceanic air traffic control
[AD-A052546] p0458 N78-27313
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
FAA remote terminal system
[AD-A054604] p0493 N78-28295
Engineering and development program plan: Wake vortex
[AD-A051143] p0546 N78-30071
Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078
Avionics cost development for alternatives of selected air traffic control systems
[AD-A054823] p0547 N78-30080
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075
Future needs and opportunities in the air traffic control system
[GPO-98-931] p0559 N78-31076
Parameters of future ATC systems relating to airport capacity/delay
[AD-A055482] p0566 N78-31130
Dulles control tower console design study
[AD-A056200] p0566 N78-31132
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325
Parameters of future ATC systems relating to airport capacity/delay
[AD-A057059] p0624 N78-33068
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
Engineering and development program plan: Discrete Address Beacon System (DABS)
[AD-A057122] p0625 N78-33073
Digitized radar data compressor --- for air traffic control

[AD-A057442] p0632 N78-33290
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655

AIR TRAFFIC CONTROLLERS (PERSONNEL)
Controller productivity in the pre-data link era
p0064 A78-15635
System measurement improves computer responses to the controller --- for air traffic control
p0596 A78-52974
Problem-solving with simulation in the world of an air traffic controller
p0451 N78-27098

AIR TRANSPORTATION
The timing of technology for commercial transport aircraft
p0001 A78-10192
World commercial air transport market to 1991
p0003 A78-11799
The domestic airline industry --- Book
p0003 A78-11951
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
The employment of helicopters in construction engineering and assembly operations in the German Democratic Republic
p0050 A78-13498
Preventing zero-growth air transportation
p0107 A78-17569
Methodology for optimizing an air fleet
p0116 A78-18668
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
The future determines the past - Bermuda I in the light of Bermuda II --- air transportation agreement
p0223 A78-26470
Bermuda II and after
p0223 A78-26471
The impact of Bermuda II on future bilateral agreements
p0224 A78-26472
The Concorde v. the United States - Some conclusions
p0224 A78-26474
Formulation of Iowa State airport system
p0229 A78-27548
Factors influencing schedule reliability in international operations
p0275 A78-29213
Critical considerations on the legal development of personal liability with attention to air transportation
p0281 A78-29944
Flying over the exclusive economic zone --- aircraft overflight regulations
p0281 A78-29945
STCL system fuel savings - Ground and air
p0287 A78-31312
International trends in airport construction
p0328 A78-32814
The products-liability movement has improved aviation safety
p0335 A78-34644
The airport city and the future intermodal transportation system --- Book
p0336 A78-34724
Norway: Well served by air - Sidelights on air transport in Europe's Far North
p0339 A78-35273
Nairobi's future has begun --- Kenya international airport facilities
p0339 A78-35275
Reliability of aviation techniques and flight safety --- Russian book
p0371 A78-36494
Stability of a helicopter carrying an underslung load
p0524 A78-49398
An integrated analysis of the fundamental problems of air transport
p0525 A78-49447
Operational regularity in air transport
p0525 A78-49449
Airliner numbers game - Does it add up --- political and technological aspects of international aircraft industries
p0525 A78-49524
Airfield pavement load evaluation - An international overview
p0525 A78-49676
Proposed load evaluation system for U.S. Air Force --- of airfield pavement
p0526 A78-49677
Transport Canada airfield pavement load evaluation
p0526 A78-49678
Model of aircraft passenger acceptance
p0526 A78-49684
'Supermarket' airplanes --- aircraft replacement cycle in major airlines
[AIAA PAPER 78-1533] p0527 A78-49769
Operations and economics of U.S. air transportation
[AIAA PAPER 78-1545] p0528 A78-49770
European air transport up to the year 2000 /Lord Douglas of Kirtleside Lecture/
p0587 A78-51520
Technical-economic analysis of the direct operating costs of air transport companies --- German thesis
p0589 A78-51752
International jurisdiction related to the Warsaw Convention during the years from 1974 to 1976. II
p0589 A78-51822
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
The changing environment of international air commerce
p0592 A78-52448
Aviation futures to the year 2000
p0595 A78-52966
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-76/31] p0137 N78-14002
Remoteness-compensation methodology for benefit/cost establishment and discontinuance criteria
[AD-A043836] p0201 N78-16074
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549
Implementation plan for an air transportation research information service
[AD-A049301] p0256 N78-19081
Benefit-cost evaluation of an intra-regional air service in the Bay area
[NASA-CR-152084] p0256 N78-19082
An overview of aviation weather services
p0267 N78-19715
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
Airport activity statistics of certificated route air carriers
[AD-A052728] p0395 N78-24102
Aircraft size and air transport costs
p0395 N78-24112
Supersonic transportation faced with energy savings
[AAAF-NT-77-28] p0397 N78-24131
An investigation of short haul air transportation in the southeastern United States
[NASA-CR-152166] p0451 N78-27094
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096
CTOL Transport Technology, 1978 --- conferences
[NASA-CP-2036-PT-2] p0496 N78-29046
Demand modelling of passenger air travel: An analysis and extension, volume 2
[NASA-CR-157402] p0545 N78-30069
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS)

project
[NASA-TM-78774] p0624 N78-33061
AIR WATER INTERACTIONS
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
AIRBORNE EQUIPMENT
NT AIRBORNE/SPACEBORNE COMPUTERS
NT LIGHT AIRBORNE MULTIPURPOSE SYSTEM
NT TERCOM
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
Airborne Oceanographic Lidar System
p0053 A78-14878
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
A contractor's perception of design to life cycle cost
p0060 A78-15553
Life cycle costing, a design tool - Nuances and caveats
p0060 A78-15554
Base motion sensitivity analysis for airborne ILIC pointing and tracking systems --- In-loop Integration Control
p0063 A78-15593
Vibration control of optical packages in aircraft
p0063 A78-15594
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
An advanced computer calculation of ground clutter in an airborne pulse Doppler radar
p0066 A78-15662
Shop test success is a function of the airborne system design --- F-16 weapon avionics
p0068 A78-15699
Moving target analysis utilizing side-looking airborne radar
p0105 A78-17196
Design and operation of an airborne air quality measurement system
p0107 A78-17575
A single site passive collision avoidance system
p0111 A78-17912
Douglas Aircraft Company laser tracker
p0124 A78-19436
Airborne navigation systems
p0170 A78-22347
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
Concorde AIDS - Powerplant applications --- Airborne Integrated Data Systems
[SAE PAPER 770995] p0181 A78-23831
MSP/ITWL airborne measuring system
p0231 A78-28196
The next generation EW system - ASPJ --- Airborne Self Protection Jammer
p0288 A78-31700
The HFB 320 airborne simulator of DFVLR as test instrument for determining flight characteristics
[DGLR PAPER 77-082] p0289 A78-31944
A test using simulated mission profile environments --- Airborne Instrumentation Subsystem pod reliability
p0291 A78-32126
A spectroradiometer for airborne remote sensing --- for geological, vegetation and hydrological mapping
p0298 A78-32396
ASPJ - Partners at last --- Airborne Self Protection Jammers
p0336 A78-34676
Color displays for airborne weather radar
p0372 A78-36980
Evaluation of airborne radar Doppler processors
p0374 A78-37477
CRT update --- for airborne displays
p0374 A78-37490
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
Airborne sampling system for plume monitoring
p0418 A78-41280
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
Lasers in aviation --- Russian book on aerospace applications
p0474 A78-45067
Airborne television transmission
p0477 A78-45218
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349
Application of rare earth/transition metal permanent magnets to 400 Hz aircraft systems - An AF overview
p0535 A78-49935
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
Modeling refinements for the rectified superconducting alternator --- airborne power supply
p0536 A78-49961
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
Dual band airborne SATCOM terminal
p0537 A78-49972
Infrared receiver performance --- airborne warning system by detection of target spectral signature
p0538 A78-49985
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
Combinatorially derived limits on the surface return for an air/surface monopulse ranging radar
p0539 A78-50001
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
Airborne equipment for all weather operations
p0570 A78-50448
Preventing helicopter mid-air collisions with the proximity warning device
p0585 A78-51223
The use of pyranometers onboard aircraft
[DLR-FB-77-24] p0145 N78-14379
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
The use of pyranometers in aircraft
[ESA-TT-433] p0250 N78-18408
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators --- wind shear
[AD-A049277] p0257 N78-19089
AIRBORNE SURVEILLANCE RADAR
Aircraft tracking problems from range rate 'turbine modulation'
p0063 A78-15631
Fire power --- fighter aircraft target acquisition and tracking radar
p0288 A78-31425
A modular side looking airborne radar to fulfill a multitude of surveillance missions
p0587 A78-51543
AIRBORNE/SPACEBORNE COMPUTERS
An approach to system integration /BASIC/ --- Basic Avionic Subsystem Integration Concept for

Navy weapons system program
[AIAA 77-1500] p0006 A78-12248
A computer controlled aircraft collision avoidance system
[AIAA 77-1524] p0008 A78-12264
Digital real time simulation of the F-5E/F flight director computer
[AIAA 77-1528] p0008 A78-12267
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Dual device redundancy management --- for RPV automatic flight control computer reliability
[AIAA 77-1441] p0015 A78-12695
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
Airborne defensive fire control algorithms
p0063 A78-15627
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics
p0064 A78-15636
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
Microprocessor controlled testing of Air Data Computers
p0065 A78-15649
Modeling of Air Data Computers in test system software
p0065 A78-15650
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
Digital avionic communication --- computer system design to improve interequipment transmission
p0068 A78-15694
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
Computerized test set for the Air Combat Maneuvering Instrumentation
p0068 A78-15700
A Flight Line Computer Loader/Test Controller for improved avionic maintenance
p0068 A78-15701
A flexible approach to on-board computer simulation
p0068 A78-15706
Development of an on-board minicomputer system
p0124 A78-19435
The digital airplane --- military avionics
p0126 A78-19547
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
Organization of a programmed matrix-operation system in an airborne digital computer
p0192 A78-24585
B-1 terrain following development
p0233 A78-28456
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
Simulation testing via mini computer --- of inertial navigation systems
p0428 A78-43057
RNAV - Corporate operators set the pace
p0509 A78-47424
AIDS in military aircraft --- Airborne Integrated Data Systems Computer
p0510 A78-47866
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
NAECON '78; Proceedings of the National Aerospace and Electronics Conference, Dayton, Ohio, May 16-18, 1978. Volumes 1, 2 & 3
p0529 A78-49851
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
Pattern recognition as an aid to radar navigation
p0530 A78-49855
In-line monitoring of digital flight control computers
p0531 A78-49860
A qualitative analysis of redundant asynchronous operation
p0531 A78-49863
MIL-STD-1553B proposed --- data bus development in avionic architecture
p0531 A78-49866
A hierarchical network for avionic systems
p0532 A78-49868
Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
Software structured weapon delivery
p0532 A78-49875
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
An interface management approach to software development
p0535 A78-49933
A study of the P-3C Omega navigation system
[AD-A044474] p0084 N78-12064
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
Stand-alone development system using a KIM-1 microcomputer module
[NASA-CR-156067] p0303 N78-20100
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787
The on-board calculation of optimal climbing paths
p0434 N78-26078
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105

AIRCRAFT
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391
Adhesive bonded aerospace structures standardized repair handbook
[AD-A055684] p0614 N78-32270

AIRCRAFT ACCIDENT INVESTIGATION
Analysis of aviation accidents with light planes and helicopters
p0053 A78-14084

The status of flight recorders in modern aircraft
p0122 A78-19294
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
General aviation crash survivability
[SAE PAPER 780017] p0331 A78-33360
A review of human factors investigation studies in aircraft accidents during the period 1957-1977 in Aeromedical Laboratory, JASDF
p0587 A78-51497
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
An analysis of three weather-related aircraft accidents
[NASA-CR-155363] p0239 N78-18024
Aircraft accident report: Knob Hill, Inc., Cessna-421, N999MB, Nogales, Arizona, 22 January 1977
[NTISUB/C/104-011] p0256 N78-19086
Aircraft accident report: Texas International Airlines, Inc., Douglas DC-9-14, N9104, Stapleton International Airport, Denver, Colorado, 16 November 1976
[NTISUB/C/104-010] p0257 N78-19087
Aircraft accident report: Southern Airways Inc., DC-9-31, N1335U, New Hope, Georgia, April 4, 1977
[NTSB-AAR-78-3] p0314 N78-21064
Aircraft accident report: Commonwealth of Pennsylvania, Piper PA-31T, N631PT, Bressler, Pennsylvania, 14 February 1977
[NTISUB/D/104-001] p0451 N78-27095
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
Annual review of aircraft accident data, US general aviation, calendar year 1976
[PB-281330/1] p0624 N78-33064
Annual review of aircraft accident data, US air carrier operations, 1976
[PB-281329/3] p0624 N78-33065

AIRCRAFT ACCIDENTS
NT BIRD-AIRCRAFT COLLISIONS
Survival after a crash
p0072 A78-16280
The endangerment of flight safety due to wind shear
[DGLR PAPER 77-033] p0191 A78-24448
Clear air turbulence accidents
p0273 A78-28833
How to make an airport unattractive to birds
p0275 A78-29209
Reliability of aviation techniques and flight safety --- Russian book
p0371 A78-36494
Optimal flare in presence of wind shears --- for aircraft in automatic approach
p0385 A78-39186
The principles of underwater escape from aircraft
[AGARD-AG-230] p0094 N78-13032
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
An analysis of three weather-related aircraft accidents
[NASA-CR-155363] p0239 N78-18024
NASA's aviation safety research and technology program
p0268 N78-19719
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
Overview of safety research
p0497 N78-29054
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063
Annual review of aircraft accident data, US general aviation, calendar year 1976
[PB-281330/1] p0624 N78-33064
Annual review of aircraft accident data, US air carrier operations, 1976
[PB-281329/3] p0624 N78-33065

AIRCRAFT ANTENNAS
Ku Band linear phased array
p0003 A78-11821
High performance antenna assembly --- for aircraft communication with satellite
p0062 A78-15588
Flight measurement of aircraft onboard antennas
p0115 A78-18504
Experimental analysis and selection of airborne antennas for aircraft-to-satellite communication systems
p0122 A78-19140
EMP response of aircraft antennas
p0169 A78-21992
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
Null steering antennas in the tactical scenario
p0226 A78-27037
Special problems in the determination of the radiation characteristics of antennas on aircraft and satellites with the aid of geometric diffraction theory
p0288 A78-31582
Current and scattering field of a long short-circuited receiving vibrator --- aircraft antenna compatibility
p0339 A78-35467
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
Communication and navigation antennas for aircraft --- Russian book
p0522 A78-48523
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897
Antenna fairings for flight vehicles /2nd revised and enlarged edition/ --- Russian book
p0598 A78-53426
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
Airborne antenna coverage requirements for the TCV B-737 aircraft --- for operation with microwave landing systems
[NASA-TM-78647] p0153 N78-15325
Aircraft response effect on E-field measurements
[AD-A047986] p0248 N78-18272
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case --- satellite and aircraft antennas
p0248 N78-18290
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
p0248 N78-18291
HF radiation characteristics of the RH-53D helicopter and the Mark 105 AMCM system
[AD-A049795] p0325 N78-21358
Multiband antenna system for tactical aircraft
[AD-A049699] p0325 N78-21363
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case --- satellite and aircraft antennas
[ESA-TT-435] p0365 N78-23310
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
[ESA-TT-436] p0365 N78-23311
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325

Analysis of monopole antenna arrays on cylinders by the geometrical theory of diffraction
[AD-A055197] p0567 N78-31335
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
AIRCRAFT APPROACH SPACING
Aircraft separation in the controlled airspace of the United States --- ATC systems
p0059 A78-15250
Calculating VOR/DME holding procedures --- for aircraft approach
p0114 A78-18503
A method of calculating ILS approach surfaces
p0275 A78-29207
Doppler MLS - The UK solution
p0280 A78-29934
Concerning the logical comparison of ATC separation standard assessment models
p0370 A78-36455
Strategic or tactical air traffic control
p0570 A78-50447
A system concept of metering and spacing --- for aircraft landing approach
p0595 A78-52968
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Parameters of future ATC systems relating to airport capacity/delay
[AD-A055482] p0566 N78-31130
Parameters of future ATC systems relating to airport capacity/delay
[AD-A057059] p0624 N78-33068
AIRCRAFT BASES
U MILITARY AIR FACILITIES
AIRCRAFT BRAKES
NT LEADING EDGE SLATS
NT TRAILING-EDGE FLAPS
NT WING FLAPS
Wear studies on aircraft brake materials
p0177 A78-23433
Description of transient motion of aviation mechanisms with double-winding electromagnetic clutches
p0220 A78-25584
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
Beryllium in aircraft brakes - A summary
p0473 A78-44736
AIRCRAFT CABINS
U AIRCRAFT COMPARTMENTS
AIRCRAFT CARRIERS
Pool fire induced cockpit degradation
p0050 A78-13415
ALIDADE - The alignment on board aircraft carriers of the inertial navigation units of Super-Etendard aircraft
p0217 A78-25149
Metallurgical behavior of arresting gear deck pendants
p0218 A78-25185
Alignment of inertial navigation units on the Super-Etendard aircraft carrier
p0342 A78-35895
Key beam weapons tests slated --- for aircraft carrier particle beam defense against cruise missiles
p0597 A78-53238
Deadload calibration program of CVN 68 catapult configuration
[AD-A042225] p0043 N78-11123
A comparison of V/STOL handling requirements with the VAK-191B
p0258 N78-19100
Evaluation of the CVN 68/CVN 69 launching system
[AD-A049044] p0265 N78-19167
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
AIRCRAFT COMMUNICATION
An airplane fiber optic multiplex data bus design and feasibility demonstration system
[AIAA 77-1475] p0005 A78-12232
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246
JTIDS - An update --- Joint Tactical Information Distribution System
[AIAA 77-1521] p0008 A78-12262
ARINC communications addressing and reporting system /ACARS/ - The data link that got implemented and why
[AIAA 77-1522] p0008 A78-12263
Data relay packages for commercial ships and aircraft
[AIAA 77-1560] p0051 A78-13685
Satellite images to aircraft in flight --- GEOS image transmission feasibility analysis
p0056 A78-14982
The relationship between simulation and flight test
p0062 A78-15586
High performance antenna assembly --- for aircraft communication with satellite
p0062 A78-15588
RPV video digital multiplexing system
p0063 A78-15613
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634
Digital avionic communication --- computer system design to improve interequipment transmission
p0068 A78-15694
Navigation procedure - Present systems and development trends
[DGIR PAPER 77-018] p0189 A78-24411
Active reference null steering for spread spectrum signals
p0226 A78-27038
The year for shaping a digital operations R&D program --- for ATC
p0231 A78-28218
Flight tests of digital data transmission --- MSK - a quadrature PSK system
p0285 A78-31050
SHF/EHF satellite communication terminal --- onboard C-135 aircraft
[AIAA 78-581] p0328 A78-32921
Aircraft Satellite Data Link
p0338 A78-34971
A three-dimensional finite-difference solution of the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124
Modern RF system design for aircraft --- tactical information exchange system
p0373 A78-37341
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
Experimental determination of a more powerful burn-in
p0481 A78-46321
Communication and navigation antennas for aircraft --- Russian book
p0522 A78-48523
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428

Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439
The AN/APX-100/V/ transponder --- for military aircraft
p0537 A78-49971
Dual band airborne SATCOM terminal
p0537 A78-49972
Applications for airborne digital communications
p0590 A78-51896
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles --- of ground-to-aircraft wideband data links
p0592 A78-52360
Safety and communication requirements in air traffic control today
p0594 A78-52956
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
Simulation model for air traffic control communications
[AD-A044256] p0037 N78-11045
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
An optical fibre, multi-terminal data system for aircraft
p0202 N78-16849
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
Objective measurement of voice channel intelligibility
[AD-A048611] p0248 N78-18264
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
A study of the economic impact of selected communications alternatives, present system definition
[AD-A052162] p0365 N78-23285
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071

AIRCRAFT COMPARTMENTS
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
Aircraft and helicopter cockpit noise
p0278 A78-29673
Measuring noise in aircraft cabins
p0283 A78-30353
Type measurements of aircraft interior sound pressure levels in cruise
[SAE ARP 1323] p0471 A78-44689
Minimum requirements for future wide-body aircraft cargo systems and compartments /intermodal/
[SAE ARP 1395] p0471 A78-44691
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
Study to develop improved fire resistant aircraft passenger seat materials, phase 1
[NASA-CR-152056] p0036 N78-11042
Characterization of secondary ignition sources in unattended compartments and full-scale baseline test --- aircraft safety
[NASA-CR-151573] p0094 N78-13028
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
Aircraft cargo compartment fire test simulation program
[NASA-CR-151951] p0324 N78-21223
Time-dependent fire behavior of aircraft cabin materials
[AD-A050923] p0324 N78-21234
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2 --- jet aircraft noise
[NASA-CR-145262] p0404 N78-24900
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ABC-11040-2] p0457 N78-27184
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618

AIRCRAFT CONFIGURATIONS
Toward a new V/STOL generation
p0016 A78-13071
Some operational experience of Concorde weight and balance
p0110 A78-17892
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
The lifting force of a low-aspect-ratio wing and body combination
p0129 A78-19709
EBF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Computational transonic flow about realistic aircraft configurations
[AIAA PAPER 78-104] p0172 A78-22576
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
Impact of engine cycle parameters on V/STOL Type A configuration and commonality
[SAE PAPER 770980] p0179 A78-23821
Sensitivity studies for several high performance VSTOL concepts
[SAE PAPER 770982] p0180 A78-23822
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
F-18A --- configurational development from YF-17 prototype
p0233 A78-28454
Aerodynamic noise of gliders
p0328 A78-32971
Lighter-than-air concepts and recent developments
p0386 A78-39395
The influence of V/STOL vehicle configuration variables on vectored jet induced flow fields in ground effect
[AIAA PAPER 78-1021] p0465 A78-43555
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
Su-19 Fencer
p0481 A78-46494
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
Minimum induced drag configurations with jet interaction
[NASA-CP-145344] p0204 N78-17002
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057

Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
Progress in supersonic cruise aircraft technology
[NASA-TM-78695] p0358 N78-23047
Configuration heating for a hypersonic research airplane concept having a 70 deg swept double-delta wing
[NASA-TP-1143] p0366 N78-23389
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
AV-8B composite wing government/industry briefing
p0396 N78-24113
Paneling techniques for use with the VORLAX computer program
[NASA-CR-145364] p0405 N78-25054
Correlation of F-16 aerodynamics and performance predictions with early flight test results
p0436 N78-26092
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
Plotit-method of interactively plotting input data for the vorlax computer program --- computerized aircraft configuration design
[NASA-CR-158896] p0495 N78-28830
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Aircraft configurations for high-speed ships
[AD-A055540] p0610 N78-32092
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054

AIRCRAFT CONSTRUCTION
U AIRCRAFT STRUCTURES

AIRCRAFT CONSTRUCTION MATERIALS
NT AIRFRAME MATERIALS
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
Manufacture of titanium components by hot isostatic pressing
p0013 A78-12456
UTTAS/HLH rotor blade fabrication and testing --- YUH-61A and XCH-62A helicopters
p0050 A78-13456
Engineering aluminum alloys for subsonic airframes
p0053 A78-14087
Saving raw materials or saving energy in aircraft construction
p0053 A78-14285
Low-cost composite primary structure --- for B-1 aircraft vertical stabilizer
p0069 A78-15855
Quiet revolution - An update on carbon fibres for aircraft structures
p0070 A78-15952
The development of the first pressurized sailplane
p0075 A78-16598
Design and fabrication of an improved performance, low cost, composite main rotor blade for the Cobra helicopter
p0077 A78-16906
Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints
p0077 A78-16907
Advanced design composite aircraft program
p0077 A78-16919
An advanced composite wing for the F-16
p0077 A78-16920
The use of composites in class 1 structures in helicopters --- for rotor blades
p0105 A78-17254
A close look at 7475 and 2024 aluminum for aircraft structures
p0108 A78-17699
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Fracture analysis of aerospace metals
p0175 A78-22724
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Today's non-metallic composite airframe structure - An airline assessment
p0218 A78-25196
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
Application of composites on civil aircraft
p0218 A78-25199
Material development for laminar flow control wing panels
p0218 A78-25200
In-service performance of polyurethane and fluorocarbon rain erosion resistant radome coatings
p0219 A78-25205
C-141A service experience - Materials and processes
p0219 A78-25207
Selecting plastics for aircraft applications
p0232 A78-28374
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
Future trends in aircraft structural design and materials
[AIAA 78-465] p0280 A78-29822
Alloy needs and design - The airframe
p0285 A78-30856
Basic problem of control of the motion of a non-Newtonian fluid in a gap --- roll forming of aircraft plastics
p0292 A78-32257
Composite structures for commercial transport aircraft
p0337 A78-34901
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
Integrally stiffened laminate construction
p0370 A78-36431
ALC/50/ values for some polymeric materials --- Apparent Lethal Concentration fire toxicity
p0371 A78-36596
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
Application of modern methods in civil aircraft construction
p0382 A78-38808
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
Material selection for the Tornado taileron
p0383 A78-38811
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
Metals in flight /2nd enlarged and revised edition/ --- aircraft and spacecraft construction materials
p0415 A78-40375
Titanium and titanium alloys for the maintenance and repair of aircraft. II
p0469 A78-44200
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513

Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
Beryllium in aircraft brakes - A summary
p0473 A78-44736
The relative fire resistance of select thermoplastic materials --- for aircraft interiors
p0480 A78-45475
Structural material trends in commercial aircraft
[AIAA PAPER 78-1552] p0482 A78-46515
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0526 A78-49693
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
Determination of the principal mechanical properties of reinforced plastic laminates for aircraft
[AD-A043350] p0044 N78-11201
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
Evaluation of windshield materials subjected to simulated supersonic flight
[AD-A049981] p0317 N78-21101
Civil components program "Wing Section'. Materials selection
[BMFT-FB-W-77-37] p0351 N78-22091
Electron beam welding titanium elements of an aircraft structure
[AAAF-NT-77-44] p0355 N78-22383
Test operations procedures physical characteristics aviation material
[AD-A053196] p0408 N78-25086
Environmental effects on composites for aircraft
[NASA-TM-78716] p0410 N78-25135
Non-destructive inspection relationships to aircraft design and materials --- conferences
[AGARD-CP-234] p0443 N78-26460
Application of small-angle neutron scattering to NDI of materials and manufactured components
p0443 N78-26465
Dynamic nondestructive testing of materials
p0444 N78-26470
Environmental effects on composites for aircraft
p0448 N78-27061
Development of advanced composite structures
p0448 N78-27062
Key issues in application of composites to transport aircraft
p0448 N78-27063
Application of porous materials for laminar flow control
p0449 N78-27072
Heavy lift helicopter - advanced technology component program - rotor blade
[AD-A053423] p0499 N78-29089
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088
New structures made of composite materials for high performance combat aircraft
p0550 N78-30114
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213
Safety against fatigue in flight: A perspective of Australian experience and research
p0553 N78-30272
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction --- fatigue life of aircraft construction materials
[BMVG-FBWT-77-23] p0555 N78-30603
Material evaluation of polyurethane foam, 0.05 g/cm 3 density
[BDX-613-1836-REV] p0567 N78-31249
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188

AIRCRAFT CONTROL

NT HELICOPTER CONTROL

Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Digital avionics, active controls, and the FAA - Advanced integrated flight systems /AIFS/
[AIAA 77-1503] p0006 A78-12250
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data --- Failure Detection and Identification for Digital Fly-By-Wire control
[AIAA 77-1506] p0007 A78-12252
Flight experience with a fail-operational digital fly-by-wire control system
[AIAA 77-1507] p0007 A78-12253
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
NASA's advanced control law program for the F-8 digital fly-by-wire aircraft
p0013 A78-12357
Adaptive control laws for F-8 flight test
p0013 A78-12358
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
A moving window parameter adaptive control system for the F8-DFBW aircraft
p0013 A78-12361
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Automatic control of airplanes and helicopters --- Russian book
p0015 A78-12849
A proposed scheme for maneuver-dependent control of stability
p0050 A78-13417
A root locus property of the extended Bass algorithm
p0053 A78-14349
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
Integrated flight trajectory control
p0061 A78-15563
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
A multifunctional guidance and control system --- for CCV F-104G aircraft
p0064 A78-15640
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
Primary flight control actuation with electric motors
p0067 A78-15689
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331

Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
Determination of flight-tracking controllers using Solheim's pole-shifting method --- for HFB-320 airbus
p0074 A78-16415
The measurement of performance and stability and control characteristics of a high subsonic jet aircraft in non-steady flight conditions employing high accuracy instrumentation techniques
p0074 A78-16596
Cockpit 2000 --- aircraft control and display device innovations
p0078 A78-17136
A comparison of three computerized design algorithms for control systems --- for missle and aircraft autopilots
p0107 A78-17527
F-16's ISAs reduce cost, weight, and leakage --- hydraulic integrated servoactuators for flight control
p0108 A78-17737
The aerodynamic vane control for V/STOL
p0110 A78-17895
Active controls for transports
p0112 A78-18020
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Multiple control input design for identification of light aircraft
p0114 A78-18466
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- application to Augmentor Wing Jet STOL Research Aircraft flare control autopilot design
p0184 A78-23917
Integrated flight control system for future transport aircraft
[DGLR PAPER 77-035] p0190 A78-24425
From analog to digital control systems - Improved performance by means of advanced technology --- used for commercial aircraft
[DGLR PAPER 77-036] p0190 A78-24426
One axis artificial feel system --- pilot proprioceptive cue forces on aircraft joy stick
p0224 A78-26488
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791
Display augmentation in manual control of remotely piloted vehicles
p0231 A78-28148
Integrated controls for a new aircraft generation
p0231 A78-28219
Fly-by-wire flight control
p0280 A78-29935
New trends and problem areas in automatic flight control
p0282 A78-30252
Sensitivity reduction in aircraft control systems
p0285 A78-31034
Analytical design of an automaton for the longitudinal control of an aircraft
p0292 A78-32262
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
Static and dynamic stability --- aircraft longitudinal control
p0332 A78-33588
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
F-5E/F spin avoidance testing
p0380 A78-38747
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
Tornado development simulation --- computerized aircraft design
p0417 A78-41025
Aircraft motions in moving air
p0425 A78-42449
Airframes and aerodynamics --- aircraft design in NASA Energy Efficient Transport program
p0461 A78-43359
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
A technique for the assessment of fighter aircraft precision controllability
[AIAA 78-1364] p0484 A78-46553
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
Modeling and parameter uncertainties for aircraft flight control system design
[AIAA 78-1371] p0484 A78-46558
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0484 A78-46559
Piloting and control systems for airplanes and helicopters --- Russian book
p0485 A78-46565
Digital control law synthesis in the w prime domain
p0507 A78-46962
Stability augmentation by eigenvalues control and model matching
p0507 A78-46965
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Optimal control synthesis in distributed systems with incomplete information --- noting aircraft applications
p0518 A78-48215
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Piloted flight simulation for active control design development
[AIAA PAPER 78-1553] p0528 A78-49771
The influence of propulsion and control system concepts on design of a Navy Type A V/STOL airplane
[AIAA PAPER 78-1505] p0529 A78-49788
Aviation control system devices --- Russian book
p0529 A78-49850
A qualitative analysis of redundant asynchronous operation
p0531 A78-49863
A hierarchical network for avionic systems
p0532 A78-49868
Assessment of dynamic coordinate alignment for elastic aircraft --- flight control Kalman filter estimates
p0538 A78-49987
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203

The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
Stability and control flight test theory, volume 1
[AD-A042583] p0042 N78-11115
The evaluation of a digital hardware voter/monitor in an aircraft control system
[AD-A043979] p0043 N78-11117
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
An introduction to the aerodynamics of flight dynamics
[RAE-TM-AERO-1710] p0152 N78-15057
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] p0210 N78-17070
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
Analytical study of ride smoothing benefits of control system configurations optimized for pilot handling qualities
[NASA-TP-1148] p0246 N78-18076
Fault-tolerant software for aircraft control systems
[NASA-CR-145298] p0251 N78-18797
Pilot centered requirements in control/display design
p0259 N78-19110
Approximate dynamic model of a turbojet engine
[NASA-TM-75263] p0264 N78-19159
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
Applications of Advances in Navigation to Guidance and Control
[AGARD-CP-220] p0314 N78-21071
UHF DF triangulation system for control and guidance of military aircraft
p0315 N78-21077
Optimum horizontal guidance techniques for aircraft
p0356 N78-23016
Optimal regulator or conventional? Setup techniques for a model following simulator control system
p0357 N78-23020
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports
[UTIAS-TN-216] p0403 N78-24755
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
Technical evaluation report on the 24th Guidance and Control Panel technical meeting: Symposium on Applications of Advances in Navigation to Guidance and Control
[AGARD-AR-115] p0452 N78-27109
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
Advanced aerodynamics and active controls technology
p0496 N78-29047
Development and flight evaluation of active controls in the L-1011 --- including wing load alleviation and stability augmentation
p0496 N78-29051
Advanced aerodynamics and active controls for a next generation transport
p0497 N78-29052
Active controls technology to maximize structural efficiency
p0497 N78-29053
Advanced control concepts for future fighter aircraft
p0549 N78-30104
Impact of active control on structures design
p0550 N78-30113

AIRCRAFT DESIGN
NT HELICOPTER DESIGN
The timing of technology for commercial transport aircraft
p0001 A78-10192
Adaptation for economization, or adaptation for the economization of energy --- in transport aircraft design and operation
p0003 A78-12030
Energy savings - The viewpoint of an aircraft manufacturer
p0003 A78-12031
The Dash 7 - An aircraft for today's environment
p0004 A78-12213
Digital avionics overview airframe manufacturers' update
[AIAA 77-1470] p0005 A78-12229
FAA role of certification - Advanced aircraft systems
[AIAA 77-1472] p0005 A78-12230
Tandem-wing aircraft
p0014 A78-12616
Facing up to the military V/STOL challenge
p0016 A78-13070
Toward a new V/STOL generation
p0016 A78-13071
Application of fracture mechanics data to aerospace design
p0050 A78-13414
The technical conception of the IL-62M. VII - Landing flap control
p0051 A78-13503
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
An optimistic view of the plane facts --- cost-efficient airliners development
p0057 A78-15086
Commercial air transport - The next ten years
p0058 A78-15091
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
Navy to seek design proposals for new V/STOLS
p0069 A78-15876
Advanced Harrier pushed for fleet use
p0069 A78-15877
The design of aircraft and helicopter protection systems --- Russian book
p0070 A78-15937
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses --- for Kfir aircraft
p0071 A78-16181
Protection for aircraft --- from lightning
p0072 A78-16274
Clearance of new stores for military aircraft - An overview of the techniques used
p0074 A78-16597
The development of the first pressurized sailplane
p0075 A78-16598
Moving V/STOL from technology to system
p0075 A78-16693

Tilt-proprotor perspective --- VTOL aircraft characteristics and development
p0075 A78-16694
Lift/cruise fan VTOL aircraft
p0076 A78-16695
How good is jet lift VTOL technology
p0076 A78-16696
Advancing transport aircraft technology towards 2000
p0078 A78-17135
Design considerations in formulating V/STOL lift plus lift/cruise supersonic fighter concepts
p0109 A78-17878
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
V/STOL presentation --- for future Navy applications
p0109 A78-17880
Weight and cost in the design arena --- in aircraft development
p0109 A78-17884
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
Design problems associated with the B-1 Composite Horizontal Stabilizer
p0109 A78-17890
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
Designing to cost /DTC/LCC/
p0110 A78-17894
The aerodynamic vane control for V/STOL
p0110 A78-17895
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
C-5 wing modification - Weight and design to cost status
p0110 A78-17897
Some opportunities in the development of light aircraft
p0112 A78-18036
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
Backfire - The bogeyman bomber --- Soviet strategic aircraft
p0116 A78-18699
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
A new mathematical method for the aerodynamic smoothing of profiles
p0118 A78-19039
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
The influence of engine position on aircraft noise
p0121 A78-19083
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
The fighter control configured vehicle /CCV/ program development and flight test summary
p0125 A78-19444
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload
p0128 A78-19693
Fighters for the 1990s - Building on today's technology
p0130 A78-20188
Designing the elements of a structure of a given guaranteed indestructibility
p0131 A78-20259
Machine algorithm for determining the cross sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
Aerodynamic optimization and analysis as part of the computer-aided design process
[AIAA PAPER 78-97] p0172 A78-22572
Distributed load aircraft concepts
[AIAA PAPER 78-100] p0172 A78-22573
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
The weight of fuel tanks in aircraft
p0175 A78-22848
Why the flexible wing. II --- for glider design
p0176 A78-23058
The impact of emerging technologies on tactical V/STOL airplane design and utility
[SAE PAPER 770985] p0180 A78-23824
Flight on 0.33 horsepower - The Gossamer Condor
[AIAA PAPER 78-308] p0184 A78-24009
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034
Future development of commercial aircraft: Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
Problems of supersonic transport
[DGLR PAPER 77-007] p0188 A78-24404
Design of a transonically profiled wing
[DGLR PAPER 77-026] p0189 A78-24417
Profile design for an advanced-technology airfoil for general aviation aircraft
[DGLR PAPER 77-027] p0189 A78-24418
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
The integrated shielded propeller as a drive system for general aviation aircraft
[DGLR PAPER 77-045] p0190 A78-24434
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
Experimental research on high lift airfoil section HL235
p0221 A78-25945
Optimum design of a landing gear shock absorber system
p0224 A78-26480
Some aspects of the thermal design of flight vehicles and processing of heat-test data
p0228 A78-27452
Future CTOL aircraft characteristics
p0229 A78-27542
Integrated controls for a new aircraft generation
p0231 A78-28219
F-18A --- configurational development from YF-17 prototype
p0233 A78-28454
YC-14B prototype testing
p0233 A78-28459

Tri-Gull amphibian development
p0233 A78-28460
US Navy examining a wide range of V/STOL concepts
p0274 A78-29175
Optimum tail plane design for artificially stabilized aircraft
p0276 A78-29334
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
Future trends in aircraft structural design and materials
[AIAA 78-465] p0280 A78-29822
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis --- Russian book
p0282 A78-30175
The An-26 aircraft: Construction and use --- Russian book
p0283 A78-30273
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
Remotely piloted aircraft in the civil environment
p0283 A78-30506
Supersonic transports --- drag minimization techniques
p0286 A78-31152
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-31307
Mirage 2000 --- French flighter aircraft design characteristics, SNECMA M53 engine and avionics
p0288 A78-31755
Use of and experience with simulation in the development of the VFW 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942
The error function of analytical structural design --- in aircraft component failure in static tests
p0291 A78-32123
The problem of choosing design parameters for unpiloted flight-vehicles --- control configured optimization
p0292 A78-32258
Optimization of the structure of a multibulkhead large-aspect-ratio wing
p0293 A78-32275
A new propeller for agricultural aircraft
p0327 A78-32645
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
Interavia combat aircraft design analysis. I - Dassault-Breguet Mirage 2000
p0328 A78-32850
Aircraft noise --- aerodynamic engineering for noise reduction
p0329 A78-33085
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
Taking a new perspective on design --- aeronautical engineering curricula
p0335 A78-34643
Dornier LSK - light combat aircraft with hover capability for anti-tank missions and shipboard deployment
p0336 A78-34822
Flight mechanics today and tomorrow - Balance and perspectives --- aircraft design, control and dynamics simulation
p0337 A78-34942
A flutter analysis of a system of two airfoils with aerodynamic interference
p0338 A78-34968
Some advances in design techniques for low noise operation of propellers and fans
p0340 A78-35659
Supercritical wing sections III --- Book
p0341 A78-35728
Supersonic transport in terms of energy savings
p0342 A78-35893
Early warning aircraft
p0342 A78-35898
Method for calculating the longitudinal, lateral, and cross aerodynamic derivatives of a flight vehicle at subsonic speeds
p0342 A78-35905
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Calculation of airfoil drag
p0369 A78-36210
The design of future cockpits for high performance fighter aircraft
p0370 A78-36446
Design for flying --- Book
p0371 A78-36498
The computation of the unsteady aerodynamics of bodies near a ground surface
p0373 A78-37408
Flow past nonconical wings with separation
p0377 A78-37775
Theoretical investigation on the crash behavior of cell structures --- aircraft structural design
p0382 A78-38805
Material selection for the Tornado taileron
p0383 A78-38811
Airships - The next generation and beyond
p0386 A78-39396
Deformation curve of rotary airfoil blades
p0386 A78-39540
The RF-15: Reconnaissance derivative of the F-15
p0415 A78-40219
Evolution of aircraft design through the CCV concept
p0416 A78-40868
Tornado development simulation --- computerized aircraft design
p0417 A78-41025
Application of supercritical airfoil technology to compressor cascades - Comparison of theoretical and experimental results
[AIAA PAPER 78-1138] p0421 A78-41842
An experimental and computational investigation of a swept-wing flow at subsonic speeds
[AIAA PAPER 78-1200] p0423 A78-41890
Strake-wing analysis and design
[AIAA PAPER 78-1201] p0423 A78-41891
Airframes and aerodynamics --- aircraft design in NASA Energy Efficient Transport program
p0461 A78-43359
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
A solar airship - More than a flight of fancy --- solar cell powered transport aircraft
p0469 A78-44226
Alpha Jet - A great leap forward --- overview of lightweight fighter-bomber
p0470 A78-44617
Wing design for a future airliner
p0471 A78-44619
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
Verification of landing gear design strength
[SAE AIR 1494] p0472 A78-44701
Integrated time, cost, and performance planning in aircraft development - Computer-aided project management in the development and construction of a modern aircraft
p0473 A78-44823

Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
Aerodynamic design of thick, supercritical wings through the concept of equivalent subsonic pressure distribution
[NLR-MP-78011-U] p0477 A78-45230
Development of low sweep, high aspect ratio wings designed for high Reynolds number
p0477 A78-45233
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
A critical look at V/STOL technology
[AIAA PAPER 78-1526] p0481 A78-46502
A perspective of laminar-flow control --- aircraft energy efficiency program
[AIAA PAPER 78-1528] p0481 A78-46503
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
Modeling and parameter uncertainties for aircraft flight control system design
[AIAA 78-1371] p0484 A78-46558
Progress in propeller aerodynamics
p0507 A78-47173
The promise of tilt rotor
p0508 A78-47266
Design philosophy for airframes
p0509 A78-47453
From Challenger to winner --- Canadair executive jet design and development
p0510 A78-47570
On the linear superposition of aerodynamic forces on wings in periodic gusts
p0510 A78-47869
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
Conceptual design study of power augmented ram wing in ground effect aircraft
[AIAA PAPER 78-1466] p0512 A78-47915
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
The design process --- computer aided design for complex aerospace systems
[AIAA PAPER 78-1483] p0514 A78-47928
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
The use of the AIAA-Bendix Design Competition in aerospace design courses
[AIAA PAPER 78-1488] p0514 A78-47931
A computerized undergraduate aircraft design course
[AIAA PAPER 78-1492] p0515 A78-47933
The value of aerospace design synthesis courses as viewed by aerospace professionals
[AIAA PAPER 78-1493] p0515 A78-47934
Effect of performance objectives on the design and cost of future USAF pilot training aircraft
[AIAA PAPER 78-1498] p0515 A78-47938
Studies of aerodynamic technology for VSTOL fighter/attack aircraft
[AIAA PAPER 78-1511] p0516 A78-47946
Aerodynamic hull design for HASPA LTA optimization --- High Altitude Superpressure Powered Aerostat Lighter Than Air
p0517 A78-48100
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
Propulsion system airframe integration studies - Advanced supersonic transport
[AIAA PAPER 78-1053] p0521 A78-48488
Highly survivable integrated avionics
p0523 A78-49163
Mirage 2000 - Dassault's better delta
p0523 A78-49169
The U.S. Navy bets on V/STOL --- technological integration for next generation aircraft design
p0525 A78-49550
Model of aircraft passenger acceptance
p0526 A78-49684
Design of a horizontal tail unit and related adjustments
p0527 A78-49736
Piloted flight simulation for active control design development
[AIAA PAPER 78-1553] p0528 A78-49771
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
The influence of propulsion and control system concepts on design of a Navy Type A V/STOL airplane
[AIAA PAPER 78-1505] p0529 A78-49788
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
Interface design considerations for F-16 sensors and weapons
p0532 A78-49874
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
Close encounters of the aeroservoelastic kind --- aerodynamics, structural dynamics, and automatic flight control systems for aircraft design applications
[AIAA 78-1289] p0542 A78-50196
The short-haul jet designed with ATC in mind
p0587 A78-51516
The shape of airliners to come
p0589 A78-51817
Boeing launches the 767
p0591 A78-52244
The L-1011-500 long-range TriStar
p0591 A78-52245
Design concepts for future air freighters
p0592 A78-52450
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Aircraft developments that hold promise for increased compatability with an advanced ATC system
p0595 A78-52967
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017

Innovative aircraft design study. Task 2: Design subtask 1. Chemically fueled aircraft. Volume 2: Appendices
[AD-A044319] p0023 N78-10054
Rotor burst protection criteria and implications
p0025 N78-10071
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
Aircraft lightning attachment phenomena
p0035 N78-11026
Lightning effects on aircraft
p0035 N78-11028
Structures protection
p0035 N78-11031
Design to minimize indirect effects
p0036 N78-11039
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
The XBQM-108A vertical attitude takeoff and landing vehicle
[AD-A044754] p0085 N78-12074
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
A preliminary study of the performance and characteristics of a supersonic executive aircraft
[NASA-TM-74055] p0095 N78-13040
Investigation of a variable camber wing design
[AD-A045951] p0137 N78-14000
Design and analysis of winglets for military aircraft, phase 2
[AD-A046152] p0140 N78-14035
Avionics and the MBCA
p0141 N78-14046
Considerations in the design of tip-coupled air-transport systems
[NASA-TM-78645] p0147 N78-15001
Factors of safety: Historical development, state of the art and future outlook
[AGARD-R-661] p0153 N78-15311
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
Minimum induced drag configurations with jet interaction
[NASA-CR-145344] p0204 N78-17002
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
Effects of structural non-linearities on aircraft vibration and flutter
[AGARD-R-665] p0211 N78-17076
Analytical study of a free-wing/free-trimmer concept --- for gust alleviation and high lift
[NASA-CR-2946] p0236 N78-18000
Separation problems encountered by aircraft designers CSS Div. des Etudes Avancees.
p0249 N78-18377
MIL-F-83300; view from an aircraft designer
p0258 N78-19101
Airplane design for gusts
p0267 N78-19717
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
Multi-variate optimization problems of flight vehicle synthesis
[PB-276123/7] p0318 N78-21103
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
Civil components program "Wing Section'. Preliminary design of engine mounting --- and nacelle mounting
[BMFT-FB-W-77-28] p0350 N78-22086
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
Civil components program "Wing Section'. Wing structure parameter study --- effects on wing weight
[BMFT-FB-W-77-30] p0350 N78-22088
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
Civil components program "Wing Section'. Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
Civil components program "Wing Section'. Materials selection
[BMFT-FB-W-77-37] p0351 N78-22091
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
A non-stationary model for atmospheric turbulence patches for the prediction of aircraft design loads
[NLR-TR-76131-U] p0361 N78-23085
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Non-destructive inspection relationships to aircraft design and materials --- conferences
[AGARD-CP-234] p0443 N78-26460
NDI techniques in aerospace
p0443 N78-26461
Critical review of various structural safety concepts taking into account NDI methods
p0443 N78-26462
The economic implications of NDE: Opportunities and payoff
p0443 N78-26463
Unfulfilled needs of non-destructive inspection of military aircraft
p0443 N78-26464
CTOL transport technology, 1978 --- conferences
[NASA-CP-2036-PT-1] p0446 N78-27046
Overview of NASA CTOL program
p0446 N78-27047
Key issues in application of composites to transport aircraft
p0448 N78-27063
Advanced structural sizing methodology
p0448 N78-27064
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
Toward a laminar-flow-control transport
p0449 N78-27071
Study to determine operational and performance criteria for STOL aircraft operating in low visibility conditions
[NASA-CR-152164] p0490 N78-28083
Airfoil design by the method of singularities via parametric optimization of geometrically constrained least squares object function

[NLR-TR-76139-U] p0491 N78-28087
Aims and progress of a battle damage repair capability in the Royal air force
p0491 N78-28091
Boundary separation problems faced by aircraft designers
p0493 N78-28399
Phenomenological aspects of quasi-stationary controlled and uncontrolled three-dimensional flow separations --- in relation to aircraft design considerations and swept wings
p0493 N78-28402
Some unsteady separation problems for slender bodies
p0493 N78-28405
CTOL Transport Technology, 1978 --- conferences
[NASA-CP-2036-PT-2] p0496 N78-29046
Advanced aerodynamics and active controls technology
p0496 N78-29047
Experimental results of winglets on first, second, and third generation jet transports --- to reduce drag coefficient
p0496 N78-29048
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
General aviation airplane structural crashworthiness user's manual. Volume 3: Related design information
[AD-A054266] p0499 N78-29085
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
Fighter aircraft design --- conferences
[AGARD-CP-241] p0549 N78-30099
Fighter superiority by design
p0549 N78-30105
Analysis of advanced variable camber concepts
p0549 N78-30108
Intake design for fighter aircraft
p0549 N78-30110
Impact of active control on structures design
p0550 N78-30113
Metal technology for future aircraft design
p0550 N78-30115
The design of a high g cockpit
p0550 N78-30118
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
Graphics for the hybrid stores separation simulation of the B77 system
[SAND-78-8212] p0562 N78-31099
Design of a transonically profiled wing
[NASA-TM-75440] p0604 N78-32052
Profile design for an advanced-technology airfoil for general aviation aircraft
[NASA-TM-75323] p0605 N78-32054
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
Supersonic transport --- using canard surfaces
[NASA-CASE-LAR-11932-1] p0609 N78-32086
Reference aircraft for ICAO Working Group E
[NASA-CR-158929] p0609 N78-32087
Advanced composites wing study program. Volume 1: Executive summary
[NASA-CR-145382-1] p0613 N78-32185
Advanced composites wing study program, volume 2
[NASA-CR-145382-2] p0613 N78-32186
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061
The common case study: Lockheed design of a supersonic cruise vehicle
[NASA-CR-158935] p0625 N78-33086
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088
A data management system for weight control and design-to-cost
p0635 N78-33780

AIRCRAFT DETECTION
A comparative evaluation of modem techniques for simultaneous data and range measurement --- aircraft position location and data communication via satellite
[AIAA 77-1474] p0005 A78-12231
Aircraft tracking problems from range rate 'turbine modulation'
p0063 A78-15631
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DLR-IB-553-75/9] p0146 N78-14895
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115

AIRCRAFT ENGINES
NT HELICOPTER ENGINES
NT T-38 ENGINE
NT T-55 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT VARIABLE CYCLE ENGINES
Simulation as a routine tool for resource and workload planning --- for aircraft engine repair and overhaul cycles
p0052 A78-13850
The improvement of various engine installation components in a subsonic transport aircraft
p0057 A78-15022
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
The next engine decision - Why it takes so long --- for passenger airliners
p0058 A78-15090
The quiet battle over aircraft noise
p0058 A78-15167
Aircraft and helicopter engines - Fundamentals of design and flight operations --- Russian book
p0059 A78-15222
Gas-turbine-engine piping --- Russian book
p0070 A78-15941
Engineering methods in engine management
p0112 A78-18021
Aircraft engines and gas turbines --- Book
p0113 A78-18400
Recent results on early diagnosis of damage in moving parts of aircraft engines
p0115 A78-18506
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054
The influence of engine position on aircraft noise
p0121 A78-19083
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
The answer to the 'engine deficiency' question --- design cycles for gas turbine engines
p0126 A78-19546
Mathematical model of the combustion-chamber filling process in a pulsating jet engine
p0131 A78-20253
Determination of the type of rotating stall in an axial compressor stage
p0131 A78-20255
Simplified theoretical model of combustion in the chamber of a pulsed jet engine
p0132 A78-20279
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine

compressor disks
p0133 A78-20390
Detection of sensor failure and output reconstruction for aircraft engine controls
[AIAA PAPER 78-4] p0157 A78-20627
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
Toward scramjet aircraft --- progress in engine development
p0177 A78-23421
A clutch for V/STOL
[SAE PAPER 770989] p0180 A78-23826
Modular engine maintenance concept considerations for aircraft turbine engines
[SAE PAPER 770991] p0180 A78-23827
Gas path analysis applied to pre and post overhaul testing of JT9D turbofan engine
[SAE PAPER 770993] p0180 A78-23829
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
Concorde AIDS - Powerplant applications --- Airborne Integrated Data Systems
[SAE PAPER 770995] p0181 A78-23831
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
Failure state detection of aircraft engine output sensors
p0184 A78-23906
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
Special problems in the development of the propulsion system for an over-the-wing engine configuration
[DGLR PAPER 77-046] p0190 A78-24435
The promise of eutectics for aircraft turbines
p0215 A78-24882
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 A78-24910
RB 211 - Progress and prospects
p0217 A78-25141
Economic and safety aspects of prolonging engine life
p0217 A78-25142
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
YC-15 development and test highlights - Phase III
p0233 A78-28457
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
General aviation energy-conservation research programs at NASA-Lewis Research Center --- for non-turbine general aviation engines
p0276 A78-29330
Control of aircraft turbine engine acceleration
p0277 A78-29583
Using simulation to determine the transfer function of the electronic part of a control loop --- for gas turbine aircraft engines
p0277 A78-29584
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
Evolution of the aircraft gas turbine engine
p0282 A78-30257
Choice of engine design for small transport aircraft
p0283 A78-30357
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309
Energy conserving aircraft from the engine viewpoint
p0287 A78-31310
Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
Mirage 2000 --- French flighter aircraft design characteristics, SNECMA M53 engine and avionics
p0288 A78-31755
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648
Aircraft powerplants /4th edition/ --- Book
p0332 A78-33805
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
Estimating the service life of rolling contact bearings when synthetic oils are used --- in aircraft gas turbine engines
p0334 A78-34324
Aircraft engine design - Development through lessons learned
p0335 A78-34641
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
Aircraft propulsion from the back room /Sixty-sixth Wilbur and Orville Wright Memorial Lecture/
p0369 A78-36279
Aero engines climb towards better fuel efficiency
p0372 A78-37114
Rolls-Royce RB401 turbofan - A new business jet engine for the 1980's
p0375 A78-37538
Aircraft auxiliary power units --- Russian book
p0377 A78-37885
Subisokinetic sampling errors for aircraft turbine engine smoke probes
p0379 A78-38575
Aircraft engine design and development through lessons learned
p0419 A78-41507
Inlet flow distortions in axial flow compressors
p0419 A78-41508
Computer aided design of radial gas turbines - A method for determining the overall rotor dimensions
p0419 A78-41509
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
General aviation internal combustion engine research programs at NASA-Lewis Research Center
[AIAA PAPER 78-932] p0462 A78-43505
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Engine options for supersonic cruise aircraft
[AIAA PAPER 78-1054] p0466 A78-43576
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592
Aircraft engine fuel pump cavitation endurance test
[SAE ARP 492B] p0471 A78-44685
Pneumatic ground power supplies for starting aircraft
[SAE AIR 944A] p0472 A78-44693
Report on aircraft engine containment
[SAE AIR 1537] p0472 A78-44705
Reduction of aircraft gas turbine engine pollutant emissions - A status report

p0480 A78-45429
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
Combustion in flow --- Russian book on combustion theory applied to aircraft combustion chambers
p0485 A78-46583
Operation of oil seales of aircraft piston engines under conditions of cavitation. I
p0507 A78-47175
The second generation of high-bypass turbofans - A market clouded by uncertainty
p0509 A78-47423
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
Analysis of GTE tolerance monitoring parameter formation --- gas turbine engine
p0517 A78-48212
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497
Boundary layers in axisymmetric inlets at angle of attack. I - Measurements
[AIAA PAPER 78-1109] p0522 A78-48499
Aspects of the thermal fatigue strength of gas-turbine engine components
p0523 A78-49176
Gas turbine engine emissions - Problems, progress and future
p0524 A78-49336
Choice of cycle for a regenerative bypass turbojet for long-range aircraft
p0527 A78-49723
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
Operating characteristics of bypass turbojet engines --- Russian book
p0540 A78-50125
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
A study of fan-rotating noise reduction
p0577 A78-50620
Assessment of the structural-mechanical design of commercial aircraft gas turbine engines
p0578 A78-50625
Application of self-cleaning air cleaners to aircraft and vehicular gas turbines
p0578 A78-50633
Comparison of the characteristics of bypass turbojet engine employing a small-size gas-turbine in the outer duct with those of a turbojet engine in supersonic cruising flight
p0581 A78-50790
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
Optimal control of aircraft powerplant --- Russian book
p0597 A78-53119
Fabrication and assembly of cable strands for aircraft engines --- Russian book
p0599 A78-53432
Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle engines
p0599 A78-53511
Nickel brazing honeycomb for aircraft gas turbine engines
p0600 A78-53751
Development of fiber shields for engine containment --- mathematical models
p0026 N78-10079
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
The promise of eutectics for aircraft turbines
[NASA-TM-73714] p0028 N78-10098
Aircraft engine emissions --- conference
[NASA-CP-2021] p0038 N78-11063
Environmental protection agency aircraft emissions standards
p0038 N78-11064
Emissions reduction technology program
p0039 N78-11065
Summary of emissions reduction technology programs
p0039 N78-11071
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Global atmospheric sampling program
p0040 N78-11076
Stratospheric cruise emission reduction program
p0040 N78-11077
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
Engineering summary of powerplant icing technical data
[AD-A045087] p0087 N78-12087
Economic problems of determining the durability of aircraft engines
[AD-A044672] p0088 N78-12096
An overview of aerospace gas turbine technology of relevance to the development of the automotive gas turbine engine
[NASA-TM-73849] p0098 N78-13062
Sources of variability and inaccuracies in aircraft gas turbine emission measurements
[PB-270898/0] p0099 N78-13069
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Technical evaluation report on the 49th(B) Propulsion and Energetics Specialists Meeting on Power Plant Reliability
[AGARD-AR-110] p0141 N78-14048
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
Engines for small propeller-driven RPVs, report of Sub-Group A of AGARD Working Group on Propulsion and Power Supplies for unmanned vehicles, volume 1
[AGARD-AR-101-VOL-1] p0151 N78-15054
An analytical study of thermal barrier coated first stage blades in a JT9D engine
[NASA-CR-135360] p0198 N78-16054
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
Analytical study of thermal barrier coated first-stage blades in an F100 engine
[NASA-CR-135359] p0208 N78-17058
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070
Aircraft emission factors
[PB-275067/7] p0250 N78-18595
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-FRC-10113-1] p0265 N78-19166
Effectiveness of the real time ferrograph and other oil monitors as related to oil filtration
[AD-A049334] p0308 N78-20134
Fuel conservation merits of advanced turboprop transport aircraft

[NASA-CR-152096] p0316 N78-21095
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
Lightweight, low compression aircraft diesel engine --- converting a spark ignition engine to the diesel cycle
[NASA-CR-135300] p0325 N78-21471
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
Amelioration of various components of a subsonic transport aircraft engine
[AAAF-NT-77-31] p0353 N78-22109
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099
Replacement process analysis: An interim report on replacement models
[AD-A052411] p0399 N78-24150
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
ACEE propulsion overview
p0446 N78-27048
CF6 jet engine performance deterioration results
p0446 N78-27049
JT9D jet engine performance deterioration
p0446 N78-27050
CF6 performance improvement
p0447 N78-27051
Engine component improvement: JT8D and JT9D performance improvements
p0447 N78-27052
Energy efficient engine: Preliminary design and integration studies
p0447 N78-27053
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
Propulsion systems noise technology
p0447 N78-27056
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
Gas turbine engine emission reduction technology program
p0447 N78-27058
Impact of broad-specification fuels on future jet aircraft --- engine components and performance
p0448 N78-27059
Fuel conservative aircraft engine technology
[NASA-TM-78962] p0454 N78-27127
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings
[AD-A053834] p0455 N78-27133
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
Study of the turbine engine industry
[AD-A055895] p0612 N78-32103
Technical evaluation report on the 51st(B) PEP Specialists' Meeting of the Propulsion and Energetics Panel on Seal Technology in Gas Turbine engines
[AGARD-AR-123] p0612 N78-32104
Technical evaluation report on the 51st (A) Specialists' Meeting of the Propulsion and Energetics Panel on Icing Testing for Aircraft Engines
[AGARD-AR-124] p0612 N78-32105
Air pollution emission factors: A bibliography with abstracts
[NTIS/PS-78/0548/4] p0617 N78-32604
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478

AIRCRAFT EQUIPMENT
NT AIRCRAFT HYDRAULIC SYSTEMS
NT AIRCRAFT LIGHTS
NT AIRCRAFT TIRES
NT BOMBING EQUIPMENT
NT EJECTION SEATS
NT TERCOM

Protective equipment for cargo transport in passenger cabins
p0051 A78-13501
Smart dispensing with the AN/ALE-39 and derivative dispenser systems --- computer controlled ejection of chaff, flares and squibs
p0054 A78-14937
A-7 ALOFT demonstration and economic analysis --- fiber optics interface for navigation and weapons delivery
p0054 A78-14939
Aircraft R-Nav system connected on optical bus,
p0054 A78-14941
A new chip detector --- component failure detection in aircraft and helicopter propulsion and transmission systems
p0058 A78-15158
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Overview of the advanced aircraft electrical system /AAES/ A-7E prototype design
p0061 A78-15573
Electrical load management for advanced aircraft electrical systems
p0062 A78-15575
Ultra high power transformers for airborne applications
p0063 A78-15625
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
The status of flight recorders in modern aircraft
p0122 A78-19294
The digital airplane --- military avionics
p0126 A78-19547
An evaluation of weight optimization of aircraft radioelectronic equipment

p0174 A78-22646
Constant speed generating systems --- for aircraft electric power supply
[SAE PAPER 771001] p0181 A78-23835
Variable speed constant frequency /VSCF/ aircraft electrical power
[SAE PAPER 771002] p0181 A78-23836
'New look' in assurance technology - 'The Hornet' --- reliability and maintainability of F-18
[AIAA PAPER 78-323] p0185 A78-24017
Aircraft electrical equipment --- Russian book
p0192 A78-24475
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
Aircraft measurements of the spatial fluctuation characteristics of atmospheric radio emission at wavelengths of 0.8 and 1.35 cm
p0229 A78-27721
MSP/ITWL airborne measuring system
p0231 A78-28196
Product support for French equipment used by civil aviation companies
p0278 A78-29657
Unique test capabilities of the Eglin AFB McKinley Climatic Laboratory
p0291 A78-32127
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
The technical concepts behind the IL-62M /8/ landing gear
p0371 A78-36622
Modern RF system design for aircraft --- tactical information exchange system
p0373 A78-37341
FAA facilities maintenance cost reduction model
p0428 A78-43043
Fire testing of flexible hose, tube assemblies, coils, fittings and similar system components
[SAE AS 1055B] p0471 A78-44681
Minimum safe performance over speed warning instruments --- for subsonic aircraft
[SAE AS 8007] p0471 A78-44683
Aircraft engine fuel pump cavitation endurance test
[SAE ARP 492B] p0471 A78-44685
Electromagnetic compatibility on gas turbine engines for aircraft propulsion
[SAE AIR 1423] p0472 A78-44699
Airborne television transmission
p0477 A78-45218
Computer aided design of aircraft electrical systems
p0479 A78-45410
AIDS in military aircraft --- Airborne Integrated Data Systems Computer
p0510 A78-47866
Evaluating avionics weight efficiency
p0518 A78-48228
Dynamic analysis of electrical systems
p0535 A78-49934
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
Aircraft electrical system testing and data reduction using digital techniques
p0535 A78-49937
The AN/APX-100/V/ transponder --- for military aircraft
p0537 A78-49971
Air-to-air designate/track with time sharing
p0538 A78-49977
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
Voltages and currents induced on wiring
p0036 N78-11036
Examples of induced voltages measured on aircraft
p0036 N78-11038
Component damage analysis
p0036 N78-11040
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
Electrical systems (vehicles and weapon subsystems)
[AD-A045343] p0090 N78-12335
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
ASD strobe light evaluation --- luminous intensity requirements for aircraft anticollision lights
[AD-A045533] p0095 N78-13036
Ejection under deceleration
[AD-A046117] p0138 N78-14018
L-band air-to-air multipath measurements --- for airborne collision avoidance systems
[AD-A045941] p0144 N78-14212
Capacitors for aircraft high power
[AD-A046340] p0151 N78-15052
Arrival inspections/pre-operational inspections (aviation materiel)
[AD-A047260] p0202 N78-16376
The role of engineering in the flight equipment purchasing process
[NASA-CR-156839] p0213 N78-17915
Determination of the flight equipment maintenance costs of commuter airlines
[NASA-CR-152069] p0213 N78-17931
Exploratory development of conductive coating materials --- for use on aircraft radomes
[AD-A048253] p0247 N78-18138
Investigation of a high speed data handling system for use with multispectral aircraft scanners
[NASA-TM-78689] p0310 N78-20481
Nickel/cadmium aircraft batteries: Battery alarm unit
[AD-A039521] p0310 N78-20631
Nickel/cadmium aircraft batteries: Rapid electrolyte exchange technique
[AD-A039335] p0311 N78-20632
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter
[AD-A039735] p0311 N78-20636
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
Air speed and attitude probe
[NASA-CASE-FRC-11009-1] p0408 N78-25088
Recess fasteners
[AD-A053221] p0443 N78-26449
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
Study to determine operational and performance criteria for STOL aircraft operating in low visibility conditions
[NASA-CR-152164] p0490 N78-28083
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
Interaction of thick film dielectric, conductor, and alumina substrate for DCU201 aircraft controller
[SAND-78-0069] p0493 N78-28349
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
Damping, static, dynamic, and impact characteristics of laminated beams typical of windshield construction
[AD-A054463] p0548 N78-30093
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
Fundamentals of noncuring sealants for aircraft fuel tanks
[AD-A054627] p0553 N78-30247
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 31 December 1977
[AD-A055672] p0562 N78-31098
An extended Kalman filter fire control system against air-to-air missiles, volume 2

[AD-A055637] p0610 N78-32091
Aircraft defogging and defrosting (transparent area)
[AD-A056976] p0626 N78-33094
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283
AIRCRAFT FUEL SYSTEMS
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298
Backfire - The bogeyman bomber --- Soviet strategic aircraft
p0116 A78-18699
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
Fire testing of flexible hose, tube assemblies, coils, fittings and similar system components
[SAE AS 1055B] p0471 A78-44681
Solid-state displays for fuel management systems --- for aircraft
p0510 A78-47900
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
Double row radial hydraulic piston pumps for aircraft hydraulic systems
p0598 A78-53249
Fuel system protection
p0035 N78-11030
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
AIRCRAFT FUELS
Increasing the resources of jet fuels
p0003 A78-11699
Future fuels for aviation
[ONERA, TP NO. 1977-156] p0057 A78-15021
Alternative hydrocarbon fuels for aviation
p0060 A78-15400
Current and future fuels for transport aircraft
p0116 A78-18669
Hydrogen fueled subsonic aircraft - A prospective
p0118 A78-18843
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-IC-5C-1] p0232 A78-28436
Properties of fuels used in the Czechoslovak aircraft industry
p0277 A78-29588
Aviation fuels - A supplier's perspective
p0287 A78-31308
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
CTOL concepts and technology development
p0461 A78-43358
Propulsion --- NASA program for aircraft fuel consumption reduction
p0461 A78-43360
Let's put fuel efficiency into perspective
p0508 A78-47269
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Fuel system protection
p0035 N78-11030
Alternative fuels
p0040 N78-11074
Full-scale aircraft crash tests of modified jet fuel
[AD-A043843] p0045 N78-11251
Effective fuel conservation programs could save millions of gallons of aviation fuel
[PB-271249/5] p0091 N78-12552
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Suspension fuels. One type of hopeful high energy fuel
[AD-A045908] p0153 N78-15294
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229
Jet aircraft hydrocarbon fuels technology
[NASA-CP-2033] p0266 N78-19325
Fuel conservation merits of advanced turboprop transport aircraft
[NASA-CR-152096] p0316 N78-21095
Some practical limitations to fuel-conservative civil engine technology
[AAAF-NT-77-29] p0351 N78-22092
Characteristics and combustion of future hydrocarbon fuels --- aircraft fuels
[NASA-TM-78865] p0401 N78-24370
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
Progress on coal-derived fuels for aviation systems
[NASA-TM-78696] p0412 N78-25545
Aviation fuels beyond the 1980's --- liquefied gases and synthetic fuels
[NASA-TM-79510] p0442 N78-26223
Equipment to neutralize aircraft fuel spills
[AD-A053862] p0460 N78-27628
Progress on coal-derived fuels for aviation systems
p0497 N78-29063
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259
Ignition of a liquid fuel under high intensity radiation --- laser weapon systems
[AD-A054974] p0614 N78-32199
AIRCRAFT GUIDANCE
The feasibility of an airborne thermal infrared position updating system
[AIAA 77-1477] p0005 A78-12234
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
Advances in inertial navigation
p0509 A78-47481
Improving the accuracy of HUD approaches in windshear with a new control law
[AIAA PAPER 78-1494] p0515 A78-47935
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904
Advanced pattern matching for navigation and guidance
p0539 A78-49998
Guidance and control problems in semiautomatic recovery of the Aquila RPV
[AIAA 78-1272] p0540 A78-50182
Approach guidance logic for a tilt-rotor aircraft
[AIAA 78-1295] p0542 A78-50202
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
An approach guidance system for remotely-piloted vehicles
[AD-A041561] p0022 N78-10043
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
Navigation, guidance and control for high performance military aircraft
p0316 N78-21090
Laser-gyro strapdown inertial system applications
p0439 N78-26130
Technical evaluation report on the 24th Guidance and Control Panel technical meeting: Symposium

on Applications of Advances in Navigation to Guidance and Control
[AGARD-AR-115] p0452 N78-27109
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072

AIRCRAFT HAZARDS
An analysis of the aircraft trailing vortex system
[AIAA PAPER 78-312] p0185 A78-24013
The Low-Level Wind Shear Alert Program
p0187 A78-24346
Wake turbulence - Gone with the wind --- airport advisory system for aircraft generated vortices
p0188 A78-24347
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave
p0188 A78-24356
Antimisting fuel kinematics related to aircraft crash landings
p0230 A78-28147
Report on aircraft engine containment
[SAE AIR 1537] p0472 A78-44705
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CR-2017] p0025 N78-10068
Wind shear modeling for aircraft hazard definition
[NASA-CR-155223] p0034 N78-11022
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
Flight safety hazards by shear winds
[TURS/SFB58/E2] p0359 N78-23073
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
Aircraft hazard detection and control utilizing an aircraft data acquisition system
[AD-A054416] p0500 N78-29092
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
[NASA-TM-78983] p0558 N78-31061
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055304] p0608 N78-32077

AIRCRAFT HYDRAULIC SYSTEMS
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
Flight testing an 8000 psi Lightweight Hydraulic System
[SAE PAPER 771007] p0181 A78-23839
Halogenated solvent-induced corrosion in hydraulic systems --- hydraulic drives for aircraft radar antennas
[ASLE PREPRINT 78-AM-4A-2] p0378 A78-38083
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
Double row radial hydraulic piston pumps for aircraft hydraulic systems
p0598 A78-53249

AIRCRAFT INDUSTRY
Energy savings - The viewpoint of an aircraft manufacturer
p0003 A78-12031
Commercial aviation future progress, programs, proposals and problems - A prognosis /W. Rupert Turnbull Lecture/
p0112 A78-18034
A rising sun in aircraft --- Japanese commercial aircraft development programs
p0379 A78-38524
Airliner numbers game - Does it add up --- political and technological aspects of international aircraft industries
p0525 A78-49524
'Supermarket' airplanes --- aircraft replacement cycle in major airlines
[AIAA PAPER 78-1533] p0527 A78-49769
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
Study of the turbine engine industry
[AD-A055895] p0612 N78-32103

AIRCRAFT INSTRUMENTS
NT ALTIMETERS
NT ANEMOMETERS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
NT AUTOMATIC PILOTS
NT FLIGHT RECORDERS
NT GYROCOMPASSES
NT HOT-WIRE ANEMOMETERS
NT POSITION INDICATORS
NT RADIO DIRECTION FINDERS
NT SPEED INDICATORS
Digital Avionics Systems Conference, 2nd, Los Angeles, Calif., November 2-4, 1977, Collection of Technical Papers and Supplement
p0004 A78-12226
Analog to digital airplanes - One easy step
[AIAA 77-1469] p0005 A78-12228
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672
Computerized test set for the Air Combat Maneuvering Instrumentation
p0068 A78-15700
Real-time digitally driven graphic-display systems in aircraft simulations
p0069 A78-15707
Cockpit 2000 --- aircraft control and display device innovations
p0078 A78-17136
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
Aircraft display design using analytical pilot models
p0113 A78-18068
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
F-4E austere heads-up display/gunsight evaluation
p0124 A78-19434
Dynamics of a string accelerometer
p0131 A78-20256
In search of a better approach concept - MLS and HUD --- Head-Up Display/Microwave Landing System
p0134 A78-20479
Airborne navigation systems
p0170 A78-22347
Testing a modern strike aircraft navigation system
p0175 A78-22852
Application of light-emitting diodes /LEDs/ in aircraft analog indicators
p0176 A78-23059
Generalized algorithm of the analytical method of gyrocompassing
p0216 A78-25013
Automatic airspace --- automatic flight control of terminal configured vehicle for ATS
p0273 A78-28834
Advanced flight decks for the 80s --- cockpit design for transport aircraft
p0273 A78-28835
Systematic analysis of safety in aviation. II
p0278 A78-29674

Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
The role of avionics in modern aircraft
p0328 A78-32651
Aircraft radar systems --- Russian book
p0377 A78-37873
The Air Combat Maneuvering Range/Instrumentation system
p0425 A78-42513
In-flight utilization of aircraft radio-navigation instruments --- Russian book
p0473 A78-44799
Onboard radio-navigation and landing aids for aircraft --- Russian book
p0473 A78-44806
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
COMED - The cockpit display of the future --- COmbined Map and Electronic Display
p0508 A78-47268
Flight deck display trends
p0510 A78-47899
Solid-state displays for fuel management systems --- for aircraft
p0510 A78-47900
The airborne detection of low-level wind shear
[AIAA PAPER 78-1495] p0515 A78-47936
Aviation control system devices --- Russian book
p0529 A78-49850
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched missiles
p0534 A78-49929
Multi-Function Inertial Reference Assembly /MIRA/ update --- digital aircraft systems
p0535 A78-49941
Digital area correlation tracker
p0536 A78-49951
Autothreshold autoscreener/FLIR system --- airborne target screener/Forward-Looking Infrared imaging system
p0538 A78-49984
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
Avionics and the MRCA
p0141 N78-14046
The use of pyranometers onboard aircraft
[DLR-FB-77-24] p0145 N78-14379
The effects of eliminating minor graduations on dial reading performance
[AD-A046709] p0150 N78-15039
The dissection of an aircraft loads spectrum produced by peak-counting accelerometers
[LTR-ST-951] p0202 N78-16391
Analysis of single and double coverage aircraft multispectral scanner arrays for positional data
p0267 N78-19553
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106
API radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118
Display systems and cockpit design
p0550 N78-30116
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
An aircraft radiometer front end, addendum
[NASA-CR-157777] p0633 N78-33405
AIRCRAFT LANDING
NT CRASH LANDING
NT DITCHING (LANDING)
The effect of radar disturbances on aircraft runway arrival time in a four-dimensional navigation terminal approach
[AIAA 77-1512] p0007 A78-12257
A flight path correlation technique for assessing the impact of turbulence in the atmospheric boundary layer on aircraft during the landing approach
p0055 A78-14961
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Airspeed control under wind shear conditions
p0071 A78-16185
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
The Interim Standard Microwave Landing System
p0112 A78-17915
The interaction between the characteristics of the operational environment and the flight performance of second-generation STOL aircraft - Some preliminary results
p0121 A78-19073
On the application of dual-phase damping to landing gears
p0123 A78-19405
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
Lateral stability of a light aircraft during landing
p0167 A78-21020
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
Airports for short takeoff and landing
p0178 A78-23471
The technical potential of instrument landing systems in the present and in the future
[DGLR PAPER 77-019] p0189 A78-24412
Mission management in the airport vicinity --- digital flight control for terminal maneuvering area
[DGLR PAPER 77-037] p0190 A78-24427
Precision DME for new landing system - Past or slow pulse
p0225 A78-26549
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
Results of Concorde monitoring
p0340 A78-35655
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
Ergonomics in commercial aircraft landing
p0371 A78-36621
A theoretical study of the effect of blade ice accretion on the power-off landing capability of a Wessex helicopter
p0372 A78-36948
Soviet landing aid draws FAA scrutiny --- laser approach guidance
p0381 A78-38773
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports
p0428 A78-43053
VASI-S - A visual landing aid
p0468 A78-43800
Onboard radio-navigation and landing aids for aircraft --- Russian book
p0473 A78-44806
VALT parameter identification flight test --- VTOL Approach and Landing Technology
p0480 A78-45439
Probabilistic model of an instrument landing system
p0509 A78-47407
Improving the accuracy of HUD approaches in windshear with a new control law
[AIAA PAPER 78-1494] p0515 A78-47935
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
Use of the U.S. interim standard microwave landing system in Canada
p0523 A78-49333

Landing aircraft under poor conditions
p0525 A78-49549
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
Visual flight simulator for the investigation of the learning process during aircraft landing
p0569 A78-50302
Airborne equipment for all weather operations
p0570 A78-50448
The Turboclair process --- fog dispersal techniques
p0571 A78-50449
The missed approach --- psychological factors in aircraft instrument landing decisions
p0587 A78-51517
Comparison of linear and nonlinear dampers for landing gears
p0590 A78-51947
VTOL aircraft dynamics --- Russian book
p0598 A78-53428
Validation of a Flexible Aircraft Take-Off and Landing Analysis (FATOLA)
[NASA-TP-1025] p0022 N78-10049
The investigation of take-off and landing characteristics of jet shortened take-off and landing aircraft (STOL)
[AD-A044292] p0023 N78-10055
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Effects of landing approach methods and separation intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[DTIAS-215] p0246 N78-18077
Flight test of stick force stability in attitude-stabilized aircraft
[NLR-MP-77015-U] p0246 N78-18080
Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] p0246 N78-18083
A piloted simulation of V/STOL landings aboard a non-aviation ship
p0259 N78-19106
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
Requirements for VLA systems
p0260 N78-19118
Wind models for flight simulator certification of landing and approach guidance and control systems
p0268 N78-19723
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043735] p0354 N78-22117
Inertially-aided, all-weather landing systems for C/TOL
p0356 N78-23017
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
Airline pilot scanning behavior during approaches and landing in a Boeing 737 simulator
p0432 N78-26064
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
Accurate timing in landings through air traffic control
p0433 N78-26067
TRSB microwave landing system demonstration program at Buenos Aires, Argentina
[AD-A054451] p0489 N78-28071
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
TRSB microwave landing system demonstration program at Dakar, Senegal
[AD-A054645] p0489 N78-28073
TRSB microwave landing system demonstration program at Nairobi, Kenya
[AD-A054646] p0489 N78-28074
Simulation and analysis of wind shear hazard --- for aircraft landing and takeoff
[NASA-CR-157470] p0504 N78-29699
TRSB microwave landing system demonstration program at John F. Kennedy International Airport, Long Island, New York, USA
[AD-A055447] p0559 N78-31070
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
Vortex advisory system simulation of Chicago O'Hare Airport
[AD-A057112] p0625 N78-33069

AIRCRAFT LAUNCHING DEVICES
The STO deck launch problem
p0259 N78-19107
Evaluation of the CVN 68/CVN 69 launching system
[AD-A049044] p0265 N78-19167
Maximum likelihood identification of the longitudinal aerodynamic coefficients of the EA-6B airplane in the catapult launch configuration
[AD-A054243] p0557 N78-31046

AIRCRAFT LIGHTS
Minimum performance standard for anticollision light systems
[SAE AS 8017] p0471 A78-44684

AIRCRAFT MAINTENANCE
Technical exploitation of aircraft /2nd revised and enlarged edition/ --- Russian book
p0014 A78-12606
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
Improved operational maintenance forcasting techniques
p0052 A78-13848
Aircraft maintenance scheduling
p0052 A78-13849
Simulation as a routine tool for resource and workload planning --- for aircraft engine repair and overhaul cycles
p0052 A78-13850
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947

An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948
Queuing models for estimating aircraft fleet availability
p0069 A78-15895
Engineering methods in engine management
p0112 A78-18021
Optimum schedule for replacement of aircraft system parts under incomplete information on their reliability
p0164 A78-20879
Modular engine maintenance concept considerations for aircraft turbine engines
[SAE PAPER 770991] p0180 A78-23827
Advanced turboprop propulsion system reliability and maintenance cost
[SAE PAPER 771009] p0182 A78-23841
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
Product support for French equipment used by civil aviation companies
p0278 A78-29657
Titanium and titanium alloys in aircraft maintenance and repair. I
p0378 A78-38246
Problem-solving with selective plating --- for aircraft metal coating repair
p0383 A78-38900
British Airways Tri-Star - Present and future
p0386 A78-39393
FAA facilities maintenance cost reduction model
p0428 A78-43043
Titanium and titanium alloys for the maintenance and repair of aircraft. II
p0469 A78-44200
LCGMOD - The fault-isolator --- for helicopter electronic systems
p0523 A78-49239
F-15 avionics Built-in-Test
p0539 A78-49991
AIDS - Aircraft-integrated-data-system
p0600 A78-53675
Avionics maintenance study
[AD-A042568] p0017 N78-10003
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004
A study of opportunistic replacement tactics for modular jet engine management
[AD-A041841] p0079 N78-12001
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance study. User's manual --- computer programs
[AD-A045625] p0091 N78-13001
F-106 scheduled maintenance improvement summary --- management methods
[AD-A045400] p0092 N78-13002
An investigation into the nature of aircraft supportability in the CILC environment
[AD-A047226] p0193 N78-15991
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
An evaluation of the capability of the logistics composite model to project the monthly aircraft sortie effectiveness of an F-15 wing
[AD-A047227] p0193 N78-15993
Development of cost estimating relationships for aircraft jet core-engine overhaul costs
[AD-A047667] p0209 N78-17067
Determination of the flight equipment maintenance costs of commuter airlines
[NASA-CR-152069] p0213 N78-17931
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
Life-cycle analysis of aircraft turbine engines
[AD-A050349] p0308 N78-20135
A life cycle cost study of contractor versus organic support of aircraft programs
[AD-A049438] p0312 N78-21045
A maintenance model for k-out-of-n subsystems aboard a fleet of advanced commercial aircraft
[NASA-CR-145272] p0345 N78-22020
Improving readiness: A cost-effective approach
[AD-A050765] p0345 N78-22021
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
Three degree intermediate level maintenance of Navy aeronautical materials
[AD-A052389] p0389 N78-24042
General aviation avionics equipment maintenance
[NASA-CR-145342] p0398 N78-24132
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051
Recess fasteners
[AD-A053221] p0443 N78-26449
Combat damage tolerance and repair of aircraft structures
[AGARD-R-667] p0491 N78-28088
Approaches to combat damage repair
p0491 N78-28089
Aims and progress of a battle damage repair capability in the Royal air force
p0491 N78-28091
Adhesive bonded aerospace structures standardized repair handbook
[AD-A055684] p0614 N78-32270
Bell UH-1H RAM/LOG report
[AD-A057231] p0626 N78-33091

AIRCRAFT MANEUVERS
A proposed scheme for maneuver-dependent control of stability
p0050 A78-13417
Application of near-optimal differential game feedback strategies to aircraft weapon delivery maneuvers
p0063 A78-15628
Computerized test set for the Air Combat Maneuvering Instrumentation
p0068 A78-15700
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791
Going for a spin - Fighter style
p0288 A78-31745
Digital computer program maneuver pilot
p0290 A78-31946
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
Mutual counteraction of two moving objects. I --- remote optimal encounter guidance
p0338 A78-34960
F-5E/F spin avoidance testing
p0380 A78-38747
The Air Combat Maneuvering Range/Instrumentation system
p0425 A78-42513
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
Minimum-time loop maneuvers of jet aircraft
p0473 A78-44830
Aircraft flying performance: Principles, flight attitude, flight phases --- German book
p0480 A78-45425
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data

analysis
[AIAA 78-1326] p0482 A78-46527
Analysis of optimal turning maneuvers in the vertical plane --- for high thrust aircraft
[AIAA 78-1333] p0482 A78-46531
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
A technique for the assessment of fighter aircraft precision controllability
[AIAA 78-1364] p0484 A78-46553
Constant-control rolling maneuver
p0507 A78-46961
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Subsystem verification of an AFIC organically developed F-15 simulation --- Air Force Logistics Command
p0533 A78-49901
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
Calculation of horizontal tail loads in maneuvering flight
[DLR-IB-536-76/4] p0137 N78-14003
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Prediction of operational combat performance
p0435 N78-26086
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121

AIRCRAFT MODELS
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
New methods for flight vibration studies --- using Fourier analysis
[DGLR PAPER 77-050] p0191 A78-24439
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
Grumman's radio-controlled experimental air force
p0379 A78-38522
EMP induced currents on a simplified missile theory and experiment
p0385 A78-39109
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
Application of cryogenics in experimental aerodynamics
p0522 A78-48982
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
An investigation on thrust vector control --- using a pneumatic technique
[DLR-IB-151-76/15] p0043 N78-11118
Ride characteristics of catamaran sea loiter aircraft in a seaway
[AD-A045363] p0096 N78-13048
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
Aircraft model prototypes which have specified handling-quality time histories
[NASA-CR-143848] p0142 N78-14054
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
Longitudinal aerodynamic characteristics of a fighter model with a close-coupled canard at Mach numbers from 0.40 to 1.20
[NASA-TP-1206] p0456 N78-27136
Aerodynamic stability testing with magnetically suspended models
p0612 N78-32108
A method for validating missile system simulation models
[AD-A055689] p0613 N78-32169
Dynamic analysis using superelements for a large helicopter model
p0617 N78-32486

AIRCRAFT NOISE
NT JET AIRCRAFT NOISE
NT SONIC BOOMS
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
Changes in ground noise levels of general aviation aircraft derived from changes in cockpit noise levels
p0002 A78-11488
Aircraft noise control
p0015 A78-12814
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
New airport in Gothenburg - How the noise problems have been handled
p0015 A78-12822
Status of aircraft noise control in Israel
p0015 A78-12823
Problems of noise certifying business aircraft
p0015 A78-12824
The analysis of helicopter rotor noise
p0059 A78-15295
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
The assessment of noise, with particular reference to aircraft
p0074 A78-16595
In-flight measurement of aircraft acoustic signals
p0105 A78-17364
Noise research at DFVLR with relevance for industry
p0115 A78-18505
Research into effects of aircraft noise on hearing of children in exposed residential areas around

an airport
p0117 A78-18779
A synthesis of the effects of noise on structures --- aircraft structural fatigue
p0121 A78-19078
The influence of engine position on aircraft noise
p0121 A78-19083
The policy problems and economics of aircraft noise
p0122 A78-19128
Flyover noise - Measurement and analysis
p0124 A78-19441
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
Advanced quiet propulsion for general aviation
[DGLR PAPER 77-044] p0190 A78-24433
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
Study of the propagation of higher modes in cylindrical ducts with impedance walls --- for aircraft noise reduction
p0221 A78-25773
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Aircraft and helicopter cockpit noise
p0278 A78-29673
Aircraft noise and its sources
p0283 A78-30351
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
Measuring noise in aircraft cabins
p0283 A78-30353
Methods of reducing aircraft noise
p0283 A78-30355
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
On sound transmission into a heavily-damped cylinder --- aircraft noise in fuselage
p0285 A78-31019
The aircraft ducted fan
p0286 A78-31153
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058
Aircraft noise --- aerodynamic engineering for noise reduction
p0329 A78-33085
Evaluation of airframe noise prediction methods
p0329 A78-33088
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Status report on aircraft noise certification
p0340 A78-35652
Results of Concorde monitoring
p0340 A78-35655
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
Aircraft flyover noise prediction
p0340 A78-35657
Some advances in design techniques for low noise operation of propellers and fans
p0340 A78-35659
Noise component method for airframe noise
p0340 A78-35660
Acoustical standards and their application to aircraft noise
p0341 A78-35661
Airport noise monitoring
p0341 A78-35663
Interior noise studies for general aviation types of aircraft. I - Field studies. II - laboratory studies
p0426 A78-42721
Long-distance focusing of Concorde sonic boom
p0517 A78-48052
Noise in airports, its measurement, and its effect on the communities in the vicinity
p0519 A78-48374
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
Current state of the law in aircraft noise pollution control
p0583 A78-51130
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
Concorde noise-induced building vibrations: International Airport Dulles --- studies by Langley Research Center
[NASA-TM-74083] p0032 N78-10839
EBF noise suppression and aerodynamic penalties
[NASA-TM-73823] p0155 N78-15852
Quiet propeller/rotor concept evaluation --- of the UH-1 helicopter
[AD-A047297] p0197 N78-16047
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
Investigation of ground reflection and impedance from flyover noise measurements
[NASA-CR-145302] p0251 N78-18874
NOISEMAP computer program operator manual. Addendum for version 3.4 of NOISEMAP
[AD-A049070] p0271 N78-19849
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
Comparison of measured and calculated helicopter rotor impulsive noise --- wind tunnel test data and prediction analysis techniques
[NASA-TM-78473] p0311 N78-20917
Airport and aircraft noise reduction
[GPO-91-591] p0326 N78-21891
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
Metrology of aircraft overflight noise. Errors due to its nonstationary character
p0358 N78-23038
Optimal guidance and control for investigating aircraft noise-impact reduction
[NASA-TP-1237] p0363 N78-23100
Noise prediction technology for CTOL aircraft
[NASA-TM-78700] p0366 N78-23875
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879
Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements --- computer program
[AD-A051700] p0403 N78-24899
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NTIS/PS-78/0239] p0410 N78-25099
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
Aircraft noise propagation --- sound diffraction by wings
p0445 N78-26879
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
Prediction of aircraft sideline noise attenuation
[NASA-TM-78717] p0460 N78-27871
Calculations of maximum A-weighted sound levels 13A --- single aircraft noise levels in airport vicinities
p0460 N78-27872
A subjective field study of helicopter blade-slap noise
[NASA-TM-78758] p0494 N78-28680
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887

Noise prediction technology for CTOL aircraft
p0497 N78-29057
Experimental determination of the rattle of simple models
[NASA-TM-78756] p0555 N78-30291
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport
[TT-7705] p0556 N78-30910
A comparison of annoyance caused by aircraft noise near London, Manchester and Liverpool airports
[TT-7706] p0557 N78-30911
Laboratory and community studies of aircraft noise effects
[NASA-TM-78776] p0618 N78-32815
Helicopter Acoustics
[NASA-CP-2052-PT-1] p0618 N78-32816
Helicopter external noise requirements: FAA perspective
p0618 N78-32817
Helicopter noise regulations: An industry perspective
p0618 N78-32818
Noise requirements from a military point of view
p0619 N78-32819
The impact of urban operations on helicopter noise requirements
p0619 N78-32820
Prediction and reduction of rotor broadband noise
p0619 N78-32821
Theoretical models of helicopter rotor noise
p0619 N78-32822
Noise due to rotor-turbulence interaction
p0619 N78-32823
Theory on acoustic sources
p0619 N78-32824
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
Helicopter noise research at the Langley V/STOL tunnel
p0619 N78-32826
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise --- langley anechoic noise facility
p0620 N78-32827
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
Helicopter external noise prediction and correlation with flight test
p0620 N78-32829
Full-scale testing of an Ogee tip rotor --- in the Langley whirl tower
p0620 N78-32830
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
Improved methods for calculating the thickness noise
p0620 N78-32832
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
A study of the noise radiation from four helicopter rotor blades --- tests in Ames 40 by 20 foot wind tunnel
p0621 N78-32835
Annoyance due to the interaction of community noise sources
p0634 N78-33613
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615
Airport noise. A bibliography with abstracts
[NTIS/PS-78/0807/4] p0634 N78-33639

AIRCRAFT PARTS
Erosion resistant coatings --- for aircraft parts
p0120 A78-19056
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
S-3A composite spoiler in-service evaluation
p0219 A78-25209
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28780
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
Quality assurance in the fabrication of products in aviation technology
p0292 A78-32267
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
Extending the service life of aircraft components made of high-strength steels --- Russian book
p0522 A78-48518
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
Determination of the principal mechanical properties of reinforced plastic laminates for aircraft
[AD-A043350] p0044 N78-11201
Study to identify stress corrosion prone parts on the TA-7C aircraft
[AD-A045489] p0100 N78-13186
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
Brake-plates for aeroplanes
[AD-A045932] p0143 N78-14150
Heat-resistant equipment for bending shaped material with electrical heating
[AD-A045909] p0145 N78-14411
Outline of aeroelastic phenomena
p0204 N78-17003
Critical inspection of bearings for life extension
p0444 N78-26472
Inspection of carbon fibre parts after fabrication and during service
p0444 N78-26476
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093

AIRCRAFT PERFORMANCE
NT HELICOPTER PERFORMANCE
20 years IL-18 --- aircraft design features, capabilities and applications
p0050 A78-13497
Some operational experience of Concorde weight and balance
p0110 A78-17892
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
F-16 progress in performance flight testing using an inertial navigation unit
p0123 A78-19427
YC-15 STOL performance flight test methods
p0125 A78-19445
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
EBF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Distributed load aircraft concepts
[AIAA PAPER 78-100] p0172 A78-22573
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
Some special boundary layer problems /20th Ludwig Prandtl Memorial Lecture/ --- aircraft wing stall characteristics

p0176 A78-23295
The Bell Model 222 --- twin engine executive transport helicopter
[SAE PAPER 770951] p0179 A78-23802
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
Digital simulation of aircraft flight path dynamics using quaternions
[AIAA PAPER 78-311] p0185 A78-24012
Technology readiness for an SST
[AIAA PAPER 78-356] p0186 A78-24031
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
1977 report to the aerospace profession; Proceedings of the Twenty-first Symposium, Beverly Hills, Calif., October 12-15, 1977
p0232 A78-28451
F-16 flight test progress report
p0232 A78-28452
YAV-8B/AV-8B advanced Harrier program
p0233 A78-28455
B-1 terrain following development
p0233 A78-28456
YC-14 flight test program
p0233 A78-28458
YC-14B prototype testing
p0233 A78-28459
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
The Dual-Flight-Simulator on the evaluation of air combat effectiveness
[DGLR PAPER 77-080] p0290 A78-31948
Aircraft takeoff from dirt airstrips
p0293 A78-32273
The design of future cockpits for high performance fighter aircraft
p0370 A78-36446
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
Planning and procedures for aircraft demonstrations - V/STOL aircraft
p0380 A78-38749
Simulation replay - Implementation and flight simulation applications
p0381 A78-38789
Alpha Jet - A great leap forward --- overview of lightweight fighter-bomber
p0470 A78-44617
Aircraft flying performance: Principles, flight attitude, flight phases --- German book
p0480 A78-45425
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
B-1 flight test progress report
[AIAA PAPER 78-1448] p0511 A78-47903
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
The airborne detection of low-level wind shear
[AIAA PAPER 78-1495] p0515 A78-47936
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
Takeoff performance of STOL aircraft
p0527 A78-49744
Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
Lost range, fuel and time due to climb and descent: Propeller-driven aeroplanes
[ESDU-77015] p0084 N78-12066
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
A preliminary study of the performance and characteristics of a supersonic executive aircraft
[NASA-TM-74055] p0095 N78-13040
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041
Characterization of nonGaussian atmospheric turbulence for prediction of aircraft response statistics
[NASA-CR-2913] p0197 N78-16044
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics
[NASA-TM-78471] p0253 N78-19056
Shipboard testing of the AV-8A Harrier
p0259 N78-19108
A non-Gaussian gust model for aircraft response analysis
[NOR-76-223] p0265 N78-19165
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
The performance of a conceptual multimission power-augmented-ram wing-in-ground effect vehicle
[AD-A051433] p0359 N78-23064
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
The analysis of operational mission execution: An assessment of low-altitude performance, navigation accuracy and weapon delivery performance
p0433 N78-26070
Performance Prediction Methods
[AGARD-CP-242] p0434 N78-26074
Performance methods for aircraft and missiles
p0434 N78-26075
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076
A computerized aircraft performance system
p0435 N78-26084
Performance predictions of Marcell Dassault-Breguet Aviation aircraft
p0435 N78-26085
Prediction of operational combat performance
p0435 N78-26086
Analysis of error sources in predicted flight performance
p0435 N78-26087
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight (Airbus and Concorde)
p0436 N78-26093
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
Impact of broad-specification fuels on future jet aircraft --- engine components and performance
p0448 N78-27059
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091

Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
Fighter superiority by design
p0549 N78-30105
Effects of dynamic aeroelasticity on handling qualities and pilot rating
p0560 N78-31084

AIRCRAFT PILOTS
NT TEST PILOTS
Fully-automated, pilot-monitored air traffic control
p0373 A78-37155
ATC system current and projected problems and recommended solutions - An airline pilot's view
[AIAA PAPER 78-1539] p0482 A78-46511
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
Preliminary Candidate Advanced Avionics System (PCAAS) --- reduction in single pilot workload during instrument flight rules flight
[NASA-CR-152026] p0024 N78-10061
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718
Wide-angle, multiviewer infinity display design
[AD-A051158] p0364 N78-23108

AIRCRAFT POWER SOURCES
T AIRCRAFT ENGINES

AIRCRAFT PRODUCTION
Helicopter manufacturing technology. II - Drive system and turbine engine technology
p0014 A78-12610
Automated channel and trough-shaped surface design system algorithm --- for aircraft
p0049 A78-13174
Article quality index realization logic-block diagram --- in aircraft industry quality control
p0049 A78-13179
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
Introduction of NC machines in aircraft industry
p0123 A78-19411
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
The Aerospatiale helicopter factory at Marignane
p0231 A78-28194
Laser and optical methods of monitoring in aircraft construction --- Russian book
p0281 A78-30123
The products-liability movement has improved aviation safety
p0335 A78-34644
Alpha Jet - A European aircraft production program with a great future
p0470 A78-44616
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
Helicopter manufacturing technology. III - Future manufacturing technologies
p0597 A78-53174
HLH rotor blade manufacturing technology development report
[AD-A050592] p0349 N78-22081
Heavy lift helicopter flight control system. Volume 1: Production recommendations
[AD-A050618] p0353 N78-22113

AIRCRAFT RELIABILITY
Structural fatigue reliability based on test results. I
p0057 A78-15025
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
Distribution of reliability characteristics among aircraft units to ensure a given flight-safety level
p0174 A78-22639
'New look' in assurance technology - 'The Hornet' --- reliability and maintainability of F-18
[AIAA PAPER 78-323] p0185 A78-24017
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
FAA's certification position on advanced avionics
p0335 A78-34642
The certification of light aircraft
p0369 A78-36280
The airline's role in the certification of aircraft - Criteria for air transport selection
p0417 A78-40995
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
Fault isolation in environmental control systems of commercial transports
[SAE AIR 1266] p0472 A78-44696
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
Distribution of reliability characteristics among airplane system units to ensure given flight safety level
p0518 A78-48221
In-line monitoring of digital flight control computers
p0531 A78-49860
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
Engine non-containment: The UK CAA view
p0025 N78-10070
Rotor burst protection criteria and implications
p0025 N78-10071
Engine non-containment: UK risk assessment methods
p0025 N78-10072
Types of rotor failure and characteristics of fragments
p0025 N78-10073
Blade fragment energy analysis
p0025 N78-10074
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
Approaches to rotor fragment protection
p0026 N78-10076
Development of fiber shields for engine containment --- mathematical models
p0026 N78-10079
Lightweight engine containment --- Kevlar shielding
p0026 N78-10080
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
Design of rotors for improved structural life
p0027 N78-10085
Materials and manufacturing processes for increased life/reliability --- of turbine wheels
p0027 N78-10086
Turbine disks for improved reliability
p0027 N78-10089
Some airline experience in preventing engine rotor failures
p0027 N78-10090
Modification of aerojet cumulative damage criterion to utilize nonlinear stress allowable
p0100 N78-13223
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398

Airworthiness evaluation NUH-1H helicopter with global positioning system
[AD-A047971] p0242 N78-18053
Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
Civil and military design requirements and their influence on the product
p0264 N78-19151
Research requirements to improve reliability of civil helicopters
[NASA-CR-145335] p0316 N78-21093
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
Aircraft structural reliability and risk theory: A review
p0555 N78-30284

AIRCRAFT SAFETY
The geriatric jet problem
p0014 A78-12600
Aircraft lightning vulnerability testing
p0062 A78-15585
Protection for aircraft --- from lightning
p0072 A78-16274
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
Fire detection devices --- for aircraft cabins
p0175 A78-22900
Systems analysis of safety in aviation. I
p0178 A78-23470
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568
F-15/16 canopy off testing
p0233 A78-28453
Fatigue life analysis of the L 13 /Blanik/ glider
p0283 A78-30360
General aviation crash survivability
[SAE PAPER 780017] p0331 A78-33360
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
The products-liability movement has improved aviation safety
p0335 A78-34644
Electronic aircraft collision avoidance system --- Russian book
p0376 A78-37603
The role of meteorology in helicopter icing problems
p0376 A78-37712
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247
The impact of flight simulators on U.S. airlines
p0382 A78-38798
The determination of margins of safety for critical aircraft systems --- electromagnetic interference effects on flight and engine controls
p0384 A78-39082
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
The missed approach --- psychological factors in aircraft instrument landing decisions
p0587 A78-51517
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Safety and communication requirements in air traffic control today
p0594 A78-52956
Aircraft developments that hold promise for increased compatability with an advanced ATC system
p0595 A78-52967
Fire detector response in aircraft applications
p0599 A78-53674
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
Some airline experience in preventing engine rotor failures
p0027 N78-10090
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
Aircraft lightning attachment phenomena
p0035 N78-11026
Lightning strike experience
p0035 N78-11027
Lightning effects on aircraft
p0035 N78-11028
Direct effects protection
p0035 N78-11029
Characterization of secondary ignition sources in unattended compartments and full-scale baseline test --- aircraft safety
[NASA-CR-151573] p0094 N78-13028
ASD strobe light evaluation --- luminous intensity requirements for aircraft anticollision lights
[AD-A045533] p0095 N78-13036
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
Icing problems on helicopter rotors
[BR59303] p0140 N78-14032
Factors of safety: Historical development, state of the art and future outlook
[AGARD-R-661] p0153 N78-15311
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
Bearing study program --- bearing measurement subsystem for SECANT Collision Avoidance System
[AD-A049767] p0314 N78-21068
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117
Performance predictions of Marcell Dassault-Breguet Aviation aircraft
p0435 N78-26085
Critical review of various structural safety concepts taking into account NDI methods
p0443 N78-26462
Safe air-space requirements above an explosive-ordnance test facility
[MRI-R-711] p0451 N78-27092
Overview of safety research
p0497 N78-29054
Safety against fatigue in flight: A perspective of Australian experience and research
p0553 N78-30272
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
Bird strikes and aviation safety. A bibliography with abstracts
[NTIS/PS-78/0694/6] p0624 N78-33066

AIRCRAFT SPECIFICATIONS
The Mi-6A helicopter --- Russian book
p0221 A78-26000
Aeronautical procurement - The primary specification system
[AIAA PAPER 78-1489] p0514 A78-47932
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284

AIRCRAFT STABILITY
NT HOVERING STABILITY
Effect of a nonconstant C/m-alpha/ on the stability of rolling aircraft
p0071 A78-16180
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
Analysis of lateral dynamic stability of an airplane with deformable control systems. II -

Numerical analysis
p0108 A78-17642
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
An appreciation of the dynamic problems associated with the external transportation of loads from a helicopter - State of the art
p0114 A78-18429
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
The PIO problem - Theory and implications to flight test --- Pilot-Induced Oscillation
p0125 A78-19442
Taking into account the effect of elasticity of the structure on the longitudinal short-period motion of an aircraft
p0164 A78-20882
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
Lateral stability of a light aircraft during landing
p0167 A78-21020
YC-15 development and test highlights - Phase III
p0233 A78-28457
UTIAS testing
p0233 A78-28461
Certifying the Learjet to 51,000 feet
p0234 A78-28462
Optimum tail plane design for artificially stabilized aircraft
p0276 A78-29334
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
Theory of bending-torsional self-oscillations of an aircraft wing system
p0292 A78-32264
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
Comparative vibration environments of transportation vehicles
p0331 A78-33442
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
F-5E/F spin avoidance testing
p0380 A78-38747
Aircraft operating environments around high speed ships --- RPV feasibility for hydrofoil ships
[AIAA PAPER 78-1184] p0422 A78-41877
Aircraft motions in moving air
p0425 A78-42449
Gust-alleviation control systems for aircraft
p0470 A78-44397
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
Atmospheric Flight Mechanics Conference, Palo Alto, Calif., August 7-9, 1978, Technical Papers
p0482 A78-46526
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Dynamic stability of a helicopter carrying a suspended payload
[AIAA 78-1335] p0483 A78-46533
Flying qualities of an aircraft with strong lateral-directional coupling --- application to space shuttle stability control
[AIAA 78-1361] p0484 A78-46550
Stability augmentation by eigenvalues control and model matching
p0507 A78-46965
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
Evolution of a cost-effective, task-oriented, lateral-directional SAS for the A-10 aircraft --- Stability Augmentation System
[AIAA PAPER 78-1460] p0512 A78-47910
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
Dynamics of the longitudinal motion of an airplane with a variable-geometry wing
p0523 A78-49285
Stability of a helicopter carrying an underslung load
p0524 A78-49398
Design of a horizontal tail unit and related adjustments
p0527 A78-49736
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
Methodology for determining, isolating, and correcting runway roughness --- using aircraft dynamic response
[AD-A044328/3] p0099 N78-13078
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
Aircraft compensator design methods
[AD-A047814] p0210 N78-17073
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Pilot evaluation of sailplane handling qualities
[NASA-CR-2960] p0360 N78-23081
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
Development of advanced stability theory suction prediction techniques for laminar flow control --- on swept wings
p0449 N78-27068
Airplane stability calculations with a card programmable pocket calculator
[NASA-TM-78678] p0552 N78-30138
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121

AIRCRAFT STRUCTURES

NT AFTERBODIES
NT AIRFRAMES
NT FOREBODIES
NT FUSELAGES
NT NOSES (FOREBODIES)
NT PLASTIC AIRCRAFT STRUCTURES
Fatigue research on bonded carbon fibre composite/metal joints --- examination of aircraft structural materials
p0002 A78-11400
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
Low-cost composite primary structure --- for B-1 aircraft vertical stabilizer
p0069 A78-15855
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses --- for Kfir aircraft
p0071 A78-16181
Strain gage calibration of a complex wing
p0071 A78-16182
Thermal flux protection for aircraft
p0072 A78-16267

On the design of aerospace shell structures
p0075 A78-16600
A new method for cutting honeycomb and composite materials for structural members
p0077 A78-16875
Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints
p0077 A78-16907
Transport construction costs studied --- composite materials use in aircraft for cost reduction
p0078 A78-17129
A close look at 7475 and 2024 aluminum for aircraft structures
p0108 A78-17699
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
The evaluation of several finite elements for the calculation of wing structures
p0119 A78-19051
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
A program for the interactive design of wing structures
p0120 A78-19063
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
A synthesis of the effects of noise on structures --- aircraft structural fatigue
p0121 A78-19078
Role of titanium in aerospace applications
p0123 A78-19402
THREDE - A free-field EMP coupling and scattering code --- electromagnetic scattering from aircraft
p0126 A78-19580
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures --- aircraft structural analysis
p0127 A78-19656
Design of load-bearing structures of maximal rigidity
p0129 A78-19707
Designing the elements of a structure of a given guaranteed indestructibility
p0131 A78-20259
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
Computer-aided statistical analysis of the stress-strain state of load-carrying structures
p0131 A78-20267
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
Determination of the constants of the diffusion theory of fatigue fracture
p0132 A78-20289
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
Problems of rating the life of aircraft design elements in random loading
p0133 A78-20402
Economical method for calculating unsteady temperature fields in thin-walled aircraft structures
p0165 A78-20903
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
External interaction of the nuclear EMP with aircraft and missiles
p0169 A78-21989
Surface current and charge density induced on aircraft
p0169 A78-21990
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443
The need for improved materials in integral aircraft fuel tanks
p0217 A78-25177
Analytical representation of the initial quality of fastener holes --- for aircraft structures
p0217 A78-25180
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
Assessment of processing methods for titanium alloys for aircraft structures
p0221 A78-26040
The development of materials for turbojets
p0221 A78-26041
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
Structural castings for aircraft - A progress report from Boeing
p0232 A78-28370
Tri-Gull amphibian development
p0233 A78-28460
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
Future trends in aircraft structural design and materials
[AIAA 78-465] p0280 A78-29822
The An-26 aircraft: Construction and use --- Russian book
p0283 A78-30273
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
Methods and equipment for testing for acoustic fatigue --- of aircraft structural components
p0293 A78-30354
Basic fatigue curves of aircraft structures
p0283 A78-30356
Load sequences for laboratory simulation of flight-by-flight stress spectra --- of aircraft structural fatigue
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress --- aircraft structural failures
p0332 A78-33700
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769

Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670
Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
Composite structures for commercial transport aircraft
p0337 A78-34901
Low energy impact behavior of composite panels
p0339 A78-35397
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
Stress intensity factors, for collinear cracks in a stiffened sheet --- aircraft structures
p0378 A78-38122
Titanium and titanium alloys in aircraft maintenance and repair. I
p0378 A78-38246
Problems of the theory of strength related to aircraft construction and civil engineering; Structural Mechanics Meeting, Ottobrunn, West Germany, June 1, 2, 1977, Lectures and Discussion Contributions
p0382 A78-38802
New technologies for aircraft structures
p0382 A78-38803
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
A computer-controlled system for fatigue testing under simulated service loading --- for aircraft structures
p0420 A78-41519
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
Large electroformed nickel moulds for aircraft parts
p0508 A78-47267
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
The potential of advanced technology for aircraft structures /10th J. D. North Memorial Lecture/
p0570 A78-50400
Diffusion brazing titanium sandwich structures
p0587 A78-51524
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
Structures protection
p0035 N78-11031
The external magnetic field environment
p0036 N78-11033
The internal magnetic fields created by diffusion
p0036 N78-11034
The internal fields coupled through apertures
p0036 N78-11035
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
Advanced joining techniques in aerospace cell structures
p0045 N78-11392
Non-welding joining, cutting and thermal spraying methods
p0046 N78-11395
Review of investigations on aeronautical fatigue in the Federal Republic of Germany, May 1975 - April 1977
[LBF-S-133] p0046 N78-11426
Substructure coupling: A different approach
p0091 N78-12455
Structural analysis of ultra-high speed aircraft structural components
[NASA-CR-155334] p0101 N78-13476
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049
An exposition on aircraft response to atmospheric turbulence using power spectral density analysis techniques
[AD-A046108] p0143 N78-14057
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3798] p0143 N78-14158
Epoxy and polyurethane paint compositions for agricultural airplanes
[AD-A045914] p0144 N78-14173
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
Application of failure analysis in aviation
[NLR-MP-77002-U] p0145 N78-14449
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
On some structure-turbulence interaction problems
p0193 N78-15996
Significance of structural nonlinearities from the structural dynamics and aeroelasticity point of view
p0204 N78-17005
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398
Calculation methods for fatigue life and crack propagation
p0241 N78-18049
Tests on details and components
p0242 N78-18050
Current standards of fatigue test on strike aircraft
[AGARD-AR-92] p0242 N78-18051
Fatigue load monitoring
p0242 N78-18052
Development of thermoplastic composite aircraft structural elements
[AD-A048468] p0258 N78-19097
Analysis and synthesis of operational loads --- aircraft structures
[ISD-193] p0310 N78-20551
Report on aircraft fatigue studies --- in-flight monitoring and stress measurements
[AD-A049876] p0317 N78-21102
An analytical and experimental study of the dynamic response of a semi-monocoque aircraft wing structure
p0348 N78-22072
Boron aluminum composite materials
[AAAF-NT-77-38] p0355 N78-22170
Medium and high resistance steels
[AAAF-NT-77-36] p0355 N78-22223
Studies on reinforced plastics --- boron fiber composites
[AAAF-NT-77-40] p0355 N78-22240
Electron beam welding titanium elements of an aircraft structure
[AAAF-NT-77-44] p0355 N78-22383
The macroscopic detection of corrosion in aluminum aircraft structures with thermal neutron beams and film imaging methods
[PB-277074/1] p0364 N78-23214
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics --- A-U461, A-U26N T6
[AAAF-NT-77-35] p0403 N78-24587
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2 --- jet aircraft noise
[NASA-CR-145262] p0404 N78-24900

The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454
Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
NDI techniques in aerospace
p0443 N78-26461
Application of small-angle neutron scattering to NDI of materials and manufactured components
p0443 N78-26465
Application of X-ray diffraction stress measuring techniques --- to aircraft structures
p0443 N78-26467
On the detection and measurement of cracks in critically loaded holes
p0444 N78-26469
NDI methods on full-scale fatigue tests and their service usage
p0444 N78-26471
Non-destructive inspection of composite materials for aircraft structural applications
p0444 N78-26474
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures
p0444 N78-26475
Detectability of flaws in boron and carbon composite parts
p0444 N78-26477
The present status and evolution of the inspection of carbon composite aircraft structures in France
p0444 N78-26478
Detection of flaws in metallic and non-metallic composite structures using liquid crystal technology
p0445 N78-26480
Environmental effects on composites for aircraft
p0448 N78-27061
Development of advanced composite structures
p0448 N78-27062
Key issues in application of composites to transport aircraft
p0448 N78-27063
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
Composite structures for commercial transport aircraft
[NASA-TM-78730] p0457 N78-27183
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455
Fatigue crack propagation analysis of aircraft structures
[AD-A053835] p0459 N78-27456
Combat damage tolerance and repair of aircraft structures
[AGARD-R-667] p0491 N78-28088
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
Aims and progress of a battle damage repair capability in the Royal air force
p0491 N78-28091
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28484
Active controls technology to maximize structural efficiency
p0497 N78-29053
Aircraft structural fatigue
[ARL/STRUC-REPT-363] p0553 N78-30271
Mechanisms of fatigue and fracture
p0553 N78-30273
Fracture mechanics fundamentals with reference to aircraft structural applications
p0554 N78-30274
Gust measurements and the N sub o problem
p0554 N78-30276
Development of a load sequence for a structural fatigue test
p0554 N78-30277
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
Structural fatigue testing
p0554 N78-30279
Current developments in the life of aircraft structure
p0554 N78-30280
Aircraft structural life monitoring and the probler of corrosion
p0554 N78-30281
NDI and the detection of fatigue
p0554 N78-30282
The development of the theory of structural fatigue
p0555 N78-30283
Load interaction effects in fatigue crack propagation
p0555 N78-30285
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction --- fatigue life of aircraft construction materials
[BMVG-FBWT-77-23] p0555 N78-30603
Recent developments in analysis of crack propagation and fracture of practical materials --- stress analysis in aircraft structures
[NASA-TM-78766] p0556 N78-30606
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints --- in aircraft structures
[DLR-FB-77-63] p0567 N78-31251
Effect of aircraft loading program modifications on the fatigue life and damage cumulation. Part 1: Effect of load peaks in case of central hole sheet specimens
[TAE-334-PT-1] p0616 N78-32462
Piezoelectric polymer transducers for detection of structural defects in aircraft
[AD-A055729] p0621 N78-32903

AIRCRAFT SURVIVABILITY
Pool fire induced cockpit degradation
p0050 A78-13415
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
General aviation crash survivability
[SAE PAPER 780017] p0331 A78-33360
Highly survivable integrated avionics
p0523 A78-49163
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
Approaches to rotor fragment protection
p0026 N78-10076
Sensitivity of the Shoe-Box in P001 analysis
[AD-A043707] p0038 N78-11055
Increasing the survivability of combat aircraft
[AD-A045910] p0140 N78-14038
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
The collection and analysis of fatigue damage occurring in aircraft in service
[RAE-LIB-TRANS-1934] p0349 N78-22077
Optimal missile evasion
[AD-A053267] p0439 N78-26135
Approaches to combat damage repair
p0491 N78-28089
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094

AIRCRAFT TIRES
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove

patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043
Rolling resistance of aircraft wheels in dry snow
[VTI-128] p0140 N78-14041
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
Chevron cutting: Experiment with new runway mixtures
[NASA-TM-75448] p0616 N78-32427
AIRCRAFT WAKES
NT HELICOPTER WAKES
NT PROPELLER SLIPSTREAMS
Some aspects of aircraft wake behavior near the ground
p0055 A78-14960
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
Thick, two-dimensional wake roll-up behind a wing of finite span - Extended calculations
p0078 A78-17131
Flight test of combat aircraft loads and dynamic behavior encountering aircraft trailing vortices
p0125 A78-19443
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
Wake turbulence - Gone with the wind --- airport advisory system for aircraft generated vortices
p0188 A78-24347
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
Remote sensing of aircraft wake vortex movement in the airport environment --- aircraft exhaust products tracking
[APCA PAPER 77-41,4] p0220 A78-25385
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports
p0428 A78-43053
Trailing vortices. II
p0507 A78-47172
Vortex dynamics
p0582 A78-51051
Minimum on-axis noise for a propeller or helicopter rotor
p0590 A78-51949
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
Aircraft developments that hold promise for increased compatability with an advanced ATC system
p0595 A78-52967
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
Inviscid modeling of aircraft trailing vortices
p0080 N78-12018
Viscous effects in aircraft trailing vortices
p0080 N78-12019
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
Application of laser velocimetry to aircraft wake-vortex measurements
p0080 N78-12021
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
Unsuccessful concepts for aircraft wake vortex minimization
p0080 N78-12023
Thrust-augmented vortex attenuation
p0080 N78-12024
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
The development and use of spoilers as vortex attenuators
p0081 N78-12027
Vortex attenuation flight experiments
p0081 N78-12028
An approximate method of calculating downwash behind a straight wing with unsteady aperiodic motion at subsonic flight speeds
[AD-A044293] p0084 N78-12069
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
Some measurements of an EBF powered-lift wake
p0390 N78-24054
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
Engineering and development program plan: Wake vortex
[AD-A051143] p0546 N78-30071
AIRCREWS
U FLIGHT CREWS
AIRDROPS
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
Development of an ultra high level airdrop container concept
[AD-A046156] p0138 N78-14017
AIRFIELD SURFACE MOVEMENTS
Warning and marking colours on the apron
p0072 A78-16278
Ground radar - Vital tool or luxury --- for aircraft surface movements
p0289 A78-31869
Mitsubishi Passenger Transfer Vehicle Model 150
p0429 A78-43298
Airfield pavement load evaluation - An international overview
p0525 A78-49676
Proposed load evaluation system for U.S. Air Force --- of airfield pavement
p0526 A78-49677
Transport Canada airfield pavement load evaluation
p0526 A78-49678
French procedures for airfield pavement load evaluation
p0526 A78-49679
Airfield pavement evaluation - The airline view
p0526 A78-49680
Airfield pavement evaluation - FAA viewpoint
p0526 A78-49681
Impact of FAA E and D elements: Eight airport summary
[AD-A054245] p0489 N78-28077
AIRFIELDS
U AIRPORTS
AIRFOIL CHARACTERISTICS
U AIRFOILS
AIRFOIL PROFILES
NT WING PROFILES
NT WING SPAN
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil

p0002 A78-11636
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
Numerical study of transonic profiles
p0120 A78-19061
The aerodynamic design of cascade airfoils - A new exact method based on conformal mapping
p0121 A78-19072
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
Obtaining exact solutions for shock-free flow past a symmetrical airfoil profile with a local supersonic zone
p0127 A78-19668
Aerodynamic characteristics of a system of airfoil profiles
p0132 A78-20275
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
The prediction of two-dimensional airfoil stall progression
[AIAA PAPER 78-155] p0160 A78-20709
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
An aerofoil with control surface in incompressible viscous flow
p0175 A78-23050
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
Successive-approximation calculation of a steady subsonic gas flow about an airfoil lattice
p0186 A78-24085
Turbulent airfoils for general aviation
p0188 A78-24364
Profile design for an advanced-technology airfoil for general aviation aircraft
[DGLR PAPER 77-027] p0189 A78-24418
Wings with controlled separation
[DGLR PAPER 77-028] p0189 A78-24419
The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
Experimental research on high lift airfoil section HL235
p0221 A78-25945
Experimental verification of an annular aerofoil theory
p0230 A78-27938
Transonic flows past a lift profile
p0274 A78-28961
Variational principles for the transonic airfoil problem
p0285 A78-30891
Mixed ventilated foils --- design for immersed hydrofoils
p0286 A78-31127
Geometric properties of NACA profiles
p0328 A78-33005
Supercritical wing sections III --- Book
p0341 A78-35728
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
Calculation of airfoil drag
p0369 A78-36210
Aerodynamics of the annular wing
p0379 A78-38475
Investigations of the transonic flow around oscillating airfoils --- Thesis
p0383 A78-38978
The closed spline functions --- applied to interpolation problems for airfoils
p0415 A78-40493
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
Application of supercritical airfoil technology to compressor cascades - Comparison of theoretical and experimental results
[AIAA PAPER 78-1138] p0421 A78-41842
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
Second order transonic small perturbation flow
p0424 A78-42198
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
The prediction of viscous effects on aerofoils in transonic flow
p0478 A78-45237
The supercritical wing - An evolution or a revolution
p0478 A78-45239
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
An experimental investigation of the drag of thick supercritical aerofoils - A progress report
p0478 A78-45243
The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
Construction of airfoil profiles approximating a given profile
p0485 A78-46588
Progress in propeller aerodynamics
p0507 A78-47173
On the theory of drag calculation and profile optimization in shockless near free molecular flow
p0510 A78-47887
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648

The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008
Description of a five-parameter profile family --- Geckeler-Mueller conformal mapping method for airfoil profiles
[VTH-LR-220] p0138 N78-14011
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane
[VTH-LR-226] p0148 N78-15019
The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
Collection of supercritical aerofoils obtained with the NLR hodograph method
[NLR-TR-75115-U] p0237 N78-18009
Airfoil profile in a nonuniform flow
[NASA-TM-75272] p0312 N78-21048
Transonic wind tunnel tests on two-dimensional aerofoil sections. Determination of pressure distribution and drag for an aerofoil with a modified NACA 65 sub2-215 section in FFA wind tunnel S5, part 2
[FFA-TN-AU-725] p0313 N78-21062
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
Design and analysis of a hodograph method for the calculation of supercritical shock-free aerofoils
[NLR-TR-77046-U] p0488 N78-28059
A mean camberline singularity method for two-dimensional steady and oscillatory aerofoils and control surfaces in inviscid incompressible flow
[ARC-CP-1391] p0545 N78-30066
Two-dimensional aerofoils and control surfaces in simple harmonic motion in incompressible inviscid flow
[ARC-CP-1392] p0545 N78-30068
Profile design for an advanced-technology airfoil for general aviation aircraft
[NASA-TM-75323] p0605 N78-32054

AIRFOIL SECTIONS
U AIRFOIL PROFILES

AIRFOIL THICKNESS
U AIRFOIL PROFILES

AIRFOILS
NT AERIAL RUDDERS
NT AILERONS
NT ARROW WINGS
NT BEARINGLESS ROTORS
NT CAMBERED WINGS
NT CARET WINGS
NT CRUCIFORM WINGS
NT DELTA WINGS
NT ELEVATORS (CONTROL SURFACES)
NT ELEVONS
NT EXTERNALLY BLOWN FLAPS
NT FIXED WINGS
NT FLAPS (CONTROL SURFACES)
NT FLEXIBLE WINGS
NT GAW-1 AIRFOIL
NT HORIZONTAL TAIL SURFACES
NT INFINITE SPAN WINGS
NT JET FLAPS
NT LAMINAR FLOW AIRFOILS
NT LEADING EDGE SLATS
NT LIFTING ROTORS
NT LOW ASPECT RATIO WINGS
NT OBLIQUE WINGS
NT PROPELLER BLADES
NT RECTANGULAR WINGS
NT RIGID ROTORS
NT RIGID WINGS
NT ROTARY WINGS
NT SLENDER WINGS
NT SPOILERS
NT SUPERCRITICAL WINGS
NT SUPERSONIC AIRFOILS
NT SWEPT FORWARD WINGS
NT SWEPT WINGS
NT SWEPTBACK WINGS
NT THIN AIRFOILS
NT THIN WINGS
NT TILTING ROTORS
NT TIP DRIVEN ROTORS
NT TRAILING-EDGE FLAPS
NT TRAPEZOIDAL WINGS
NT TWISTED WINGS
NT UNSWEPT WINGS
NT VARIABLE SWEEP WINGS
NT WING FLAPS
NT WINGS
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
Application of a multi-level grid method to transonic flow calculations
p0011 A78-12296
Small perturbation expansions in unsteady aerofoil theory
p0074 A78-16401
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
An analysis method for the viscous flow over circulation-controlled airfoils
[AIAA PAPER 78-157] p0160 A78-20710
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
Experimental verification of an annular aerofoil theory
p0230 A78-27938
Some measurements in two-dimensional turbulent wakes
p0289 A78-31836
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845
A flutter analysis of a system of two airfoils with aerodynamic interference
p0338 A78-34968
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
The next approximation after boundary layer theory --- machine blade associated unsteady flow effects
p0373 A78-37409
Notes on the transonic indicial method --- for two dimensional airfoil flutter derivative calculation
p0376 A78-37732
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
Hermite closed splines
p0527 A78-49713
Turbulent boundary layer separation on a curved wall with normal compression shock
p0583 A78-51155
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
Aerodynamic interference in a system of two harmonically oscillating airfoils and its

influence on flutter
p0019 N78-10016
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
An assessment of circulation control airfoil development
[AD-A043826] p0033 N78-11012
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
Calculations of some unsteady transonic flows about the NACA 64A006 and 64A010 airfoils
[AD-A046178] p0137 N78-13999
A numerical study of viscous flows around airfoils
[AD-A046084] p0137 N78-14001
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2 --- tabulated test results
[NASA-CR-2915] p0203 N78-16998
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
Circulation control airfoil study --- wind tunnel stability tests
[AD-A048677] p0237 N78-18005
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
Transonic flow past an airfoil with condensation
[NASA-TM-75201] p0252 N78-19053
Water-tunnel experiments on an oscillating airfoil at RE equals 21,000
[NASA-TM-78446] p0253 N78-19058
Static stability of vehicles which use the lifting force of airfoils
[AD-A049069] p0255 N78-19074
An experimental investigation of oscillating flows over an airfoil --- rotary wings
p0299 N78-20058
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
An improved version of the NASA-Lockheed multielement airfoil analysis computer program
[NASA-CR-145323] p0301 N78-20077
Numerical study of transonic flow over oscillating airfoils using the full potential equation
[NASA-TP-1120] p0313 N78-21055
Unsteady, surface pressure and near-wave hotwire measurements of a circulation control airfoil
[AD-A050025] p0313 N78-21061
Features of unsteady flows over airfoils
p0346 N78-22054
Dynamic stall of an oscillating airfoil
p0346 N78-22055
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
Aerodynamic phenomena in an oscillating transonic NCA airfoil cascade including loading effects
p0347 N78-22066
AV-8B composite wing government/industry briefing
p0396 N78-24113
Transonic wind tunnel tests on a NACA 0012 aerofoil
[ARL/AERO-REPT-148] p0437 N78-26095
A study of test section configuration for shock tube testing of transonic airfoils
[NASA-CR-157237] p0442 N78-26153
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
Airfoil design by the method of singularities via parametric optimization of geometrically constrained least squares object function
[NLR-TR-76139-U] p0491 N78-28087
Prediction of unsteady separated flows on oscillating airfoils
p0494 N78-28409
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation
[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils
[AD-A055140] p0558 N78-31047
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327
A comparative study of two computational methods for calculating unsteady transonic flows about oscillating airfoils
[AD-A056946] p0623 N78-33058

AIRFRAME MATERIALS
Engineering aluminum alloys for subsonic airframes
p0053 A78-14087
Advanced design composite aircraft program
p0077 A78-16919
Applications of carbon fibre composites in commercial aircraft
p0105 A78-17253
Recent progress and technical and economic outlooks in the processing of materials for airframe elements
p0221 A78-26036
The development of materials for turbojets
p0221 A78-26041
Alloy needs and design - The airframe
p0285 A78-30856
An example of additive damping as a cost savings alternative to redesign --- turbofan engine inlet development
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
New technologies for aircraft structures
p0382 A78-38803
A method of predicting stress corrosion cracking
p0468 A78-44105
Design philosophy for airframes
p0509 A78-47453
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces --- aging of airframe materials
[AD-A045277] p0096 N78-13049
Real-time testing of titanium sheet and extrusion coupon specimens subjected to Mach 2.7 supersonic cruise aircraft wing stresses and temperatures
[NASA-CR-2754] p0101 N78-13478
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049

Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
A general study of hybrid composite laminates --- airframe materials
[AD-A048364] p0266 N78-19208
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199

AIRFRAMES
Digital avionics overview airframe manufacturers' update
[AIAA 77-1470] p0005 A78-12229
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
A superelement technique for designing helicopter fuselages
p0174 A78-22627
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
Today's non-metallic composite airframe structure - An airline assessment
p0218 A78-25196
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
Evaluation of airframe noise prediction methods
p0329 A78-33088
Noise component method for airframe noise
p0340 A78-35660
Airframes and aerodynamics --- aircraft design in NASA Energy Efficient Transport program
p0461 A78-43359
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Propulsion system airframe integration studies - Advanced supersonic transport
[AIAA PAPER 78-1053] p0521 A78-48488
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
Cast Aluminum Structures Technology (CAST)
[AD-A043469] p0045 N78-11236
Stress intensity factors for a cracked hole in a row of holes --- using compounding technique
[RAE-TR-77073] p0154 N78-15525
A critique of aircraft airframe cost models
[AD-A047181] p0198 N78-16048
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-201] p0349 N78-22083
Buckling of struts. Lipped and unlipped Z sections
[ESDU-77030] p0366 N78-23469
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085
Propulsion-airframe interactions predictability
p0434 N78-26079
Evaluation of a method for the predicton of jet-airframe interference
[NLR-TR-76132-U] p0438 N78-26111
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Airframe response to separated flow
p0438 N78-26116
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
Proceedings of the Workshop on Engine-Airframe Integration Short-Haul Aircraft
[AD-A053417] p0499 N78-29088
Weldbraze airframe components
[AD-A054042] p0504 N78-29457
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213
Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100
Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions --- airframe fatigue cracking
[AD-A055483] p0617 N78-32504
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483

AIRLINE OPERATIONS
World commercial air transport market to 1991
p0003 A78-11799
The domestic airline industry --- Book
p0003 A78-11951
Airline viewpoint on systems development and integration --- avionics information processing
[AIAA 77-1496] p0006 A78-12244
The geriatric jet problem
p0014 A78-12600
Technical exploitation of aircraft /2nd revised and enlarged edition/ --- Russian book
p0014 A78-12606
Mathematical planning and bulk service methods of civil aviation --- Russian book
p0015 A78-13000
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Further improvement of the efficiency of computational procedures in flight operations
p0051 A78-13499
Protective equipment for cargo transport in passenger cabins

p0051 A78-13501
Simulation as a routine tool for resource and workload planning --- for aircraft engine repair and overhaul cycles
p0052 A78-13850
Airport aircraft economic interface
[SAE PAPER 770580] p0060 A78-15387
Queuing models for estimating aircraft fleet availability
p0069 A78-15895
Advances in aircraft efficiency
p0112 A78-18022
Commercial aviation future progress, programs, proposals and problems - A prognosis /W. Rupert Turnbull Lecture/
p0112 A78-18034
Distribution of reliability characteristics among aircraft units to ensure a given flight-safety level
p0174 A78-22639
The collision risk
p0175 A78-22851
Planning for the next generation aircraft - An airline view
[AIAA PAPER 78-361] p0186 A78-24033
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
The future determines the past - Bermuda I in the light of Bermuda II --- air transportation agreement
p0223 A78-26470
Bermuda II and after
p0223 A78-26471
The impact of Bermuda II on future bilateral agreements
p0224 A78-26472
The Concorde v. the United States - Some conclusions
p0224 A78-26474
Future CTOL aircraft characteristics
p0229 A78-27542
Factors influencing schedule reliability in international operations
p0275 A78-29213
Critical considerations on the legal development of personal liability with attention to air transportation
p0281 A78-29944
Flying over the exclusive economic zone --- aircraft overflight regulations
p0281 A78-29945
The division of air transport markets between carriers - Local service operations
p0284 A78-30697
Aviation fuel usage - Economy and conservation
p0285 A78-30698
Terminal airspace/airport congestion delays
p0330 A78-33121
Monitoring airline performance
p0332 A78-33587
Expansion potential for the local service air carrier
p0376 A78-37539
The impact of flight simulators on U.S. airlines
p0382 A78-38798
British Airways Tri-Star - Present and future
p0386 A78-39393
The airline's role in the certification of aircraft - Criteria for air transport selection
p0417 A78-40995
The effect of fuel consumption on cost developments
p0469 A78-44197
Distribution of reliability characteristics among airplane system units to ensure given flight safety level
p0518 A78-48221
An integrated analysis of the fundamental problems of air transport
p0525 A78-49447
Operational regularity in air transport
p0525 A78-49449
Airliner numbers game - Does it add up --- political and technological aspects of international aircraft industries
p0525 A78-49524
Supermarket' airplanes --- aircraft replacement cycle in major airlines
[AIAA PAPER 78-1533] p0527 A78-49769
Operations and economics of U.S. air transportation
[AIAA PAPER 78-1545] p0528 A78-49770
Airports in the year 2000 - Suggestions for improving capacity
p0570 A78-50435
Toulouse combines elegance with economy --- French airport design
p0570 A78-50436
Improved passenger flow through simulation
p0570 A78-50437
And now 'the deregulators' - When will they learn
p0582 A78-51127
British Airways v. Port Authority - Its impact on aircraft noise regulation
p0582 A78-51128
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
Airline contributions to better air traffic control
p0587 A78-51518
Optimization of the structure of the LOT Polish Airlines fleet for the requirements of international passenger transport
p0588 A78-51598
New organization of air traffic over the North Atlantic region
p0588 A78-51599
Optimization of quasi-stationary long distance flights in the case of different directions for conducting the flight according to a model which has been idealized to a large extent --- German thesis
p0589 A78-51749
Technical-economic analysis of the direct operating costs of air transport companies --- German thesis
p0589 A78-51752
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
Some airline experience in preventing engine rotor failures
p0027 N78-10090
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028
Determination of the flight equipment maintenance costs of commuter airlines
[NASA-CR-152069] p0213 N78-17931
A simulation model for an enplaning-passenger-vehicle curbside at high-volume airports
p0239 N78-18020
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549
British Airways helicopter operations
p0262 N78-19133
A new method for estimating current and future transport aircraft operating economics
[NASA-CR-145190] p0303 N78-20094
Airport and aircraft noise reduction
[GPO-91-591] p0326 N78-21891
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
Aircraft size and air transport costs
p0395 N78-24112
An operator's viewpoint: How to reduce the fuel consumption in aeronautical maintenance
[AAAP-NT-77-26] p0397 N78-24129
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062

AIRPLANE PRODUCTION COSTS
Saving raw materials or saving energy in aircraft construction
p0053 A78-14285
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886

C-5 wing modification - Weight and design to cost status
p0110 A78-17897
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043

AIRPORT BEACONS
NT DISCRETE ADDRESS BEACON SYSTEM
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247

AIRPORT LIGHTS
NT RUNWAY LIGHTS
Lighting in airport terminals
p0072 A78-16279

AIRPORT PLANNING
Aircraft noise control
p0015 A78-12814
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
New airport in Gothenburg - How the noise problems have been handled
p0015 A78-12822
Status of aircraft noise control in Israel
p0015 A78-12823
Airport planning and economics - Some changing perspectives
[SAE PAPER 770581] p0060 A78-15386
Warning and marking colours on the apron
p0072 A78-16278
Preventing zero-growth air transportation
p0107 A78-17569
The possibility of installing a Microwave Landing System at the Palermo/Punta Raisi airport
p0119 A78-19042
The policy problems and economics of aircraft noise
p0122 A78-19128
A new approach to future airport planning
p0134 A78-20482
Airports for short takeoff and landing
p0178 A78-23471
A study on the capacity of runway systems
p0188 A78-24374
Airport choice in low demand region
p0229 A78-27547
Formulation of Iowa State airport system
p0229 A78-27548
More public consultation on airport plans
p0275 A78-29208
Profile of the airport-development crisis
p0282 A78-30244
Looking offshore at the airport future
p0282 A78-30245
Tandem-queue algorithm for airport user flows
p0284 A78-30677
Airport/community environmental planning
p0284 A78-30678
Sweden's latest- and last --- airport
p0289 A78-31868
International trends in airport construction
p0328 A78-32814
Terminal airspace/airport congestion delays
p0330 A78-33121
The strategy of traffic regulation in Western Europe
p0334 A78-34374
The airport city and the future intermodal transportation system --- Book
p0336 A78-34724
Norway: Well served by air - Sidelights on air transport in Europe's Far North
p0339 A78-35273
Nairobi's future has begun --- Kenya international airport facilities
p0339 A78-35275
Airport noise monitoring
p0341 A78-35663
Planning and design of small airports in Canada
p0341 A78-35668
Study on problems of terminal site location --- environmental effects on airport, harbor or truck depot
p0369 A78-36323
Analysis of pavements designed by CBR equation --- California Bearing Ratio for airfield pavements
p0426 A78-42856
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
Computer simulation of terminal utilization --- for airport planning
p0469 A78-44225
Noise in airports, its measurement, and its effect on the communities in the vicinity
p0519 A78-48374
Airfield pavement load evaluation - An international overview
p0525 A78-49676
Proposed load evaluation system for U.S. Air Force --- of airfield pavement
p0526 A78-49677
Transport Canada airfield pavement load evaluation
p0526 A78-49678
French procedures for airfield pavement load evaluation
p0526 A78-49679
Airfield pavement evaluation - The airline view
p0526 A78-49680
Airfield pavement evaluation - FAA viewpoint
p0526 A78-49681
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
Glass airports --- building design
p0570 A78-50434
Airports in the year 2000 - Suggestions for improving capacity
p0570 A78-50435
Toulouse combines elegance with economy --- French airport design
p0570 A78-50436
Improved passenger flow through simulation
p0570 A78-50437
Preparing today, to meet the ATC challenges of tomorrow --- for civil aircraft operations in Taiwan
p0596 A78-52973
ATC in the year 2000
p0596 A78-52978
Research in airport pavements --- conference
[AD-A043179] p0031 N78-10120
Uncertainties in airport cost analysis and their effect on site selection
p0089 N78-12104
Establishment of new major public airports in the United States
[AD-A046462] p0201 N78-16075
Airport improvement task force delay study: Delay model validation plan
[AD-A048112] p0211 N78-17077
Air traffic congestion and capacity. A bibliography with abstracts
[NTIS/PS-78/0598/9] p0609 N78-32085

AIRPORT SECURITY
How to make an airport unattractive to birds
p0275 A78-29209
Airport fires and their causes
p0339 A78-35274

AIRPORT SURFACE DETECTION EQUIPMENT
Airport traffic surveillance
p0594 A78-52957
Airport surface traffic control TAGS planning alternatives and cost/benefit analysis
[AD-A037790] p0196 N78-16038
Project Plan: Tower automated ground surveillance system development program
[AD-A051621] p0400 N78-24155
Airport Surface Detection Equipment (ASDE-3) project plan
[AD-A052362] p0457 N78-27144
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297

AIRPORT TOWERS
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Feasibility study for simulation of an airport tower control environment
[AD-A051174] p0400 N78-24154
Project Plan: Tower automated ground surveillance system development program
[AD-A051621] p0400 N78-24155
Tower-related major system development programs
[AD-A054608] p0489 N78-28076

Dulles control tower console design study
[AD-A056200] p0566 N78-31132
AIRPORTS
NT HELIPORTS
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
Technical, economic and operational aspects of an FAA engineering study and feasibility determination for a ground-based warm fog dispersal system
p0056 A78-14993
A modern warm fog dispersal system
p0056 A78-14994
The FAA Slant Visibility Range measurement system
p0056 A78-14996
Airport aircraft economic interface
[SAE PAPER 770580] p0060 A78-15387
Brief ecological survey of airports and the bird hazard problem
p0115 A78-18666
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
Simulation of airport air quality by box photochemical and Gaussian models
p0216 A78-25033
Remote sensing of aircraft wake vortex movement in the airport environment --- aircraft exhaust products tracking
[APCA PAPER 77-41,4] p0220 A78-25385
Factors influencing schedule reliability in international operations
p0275 A78-29213
Quick bearing strength tests for concrete pavements
p0469 A78-44224
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474
Concorde emissions at Dulles International Airport - Results of measurements
p0597 A78-53050
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
Concorde noise-induced building vibrations: International Airport Dulles --- studies by Langley Research Center
[NASA-TM-74083] p0032 N78-10839
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183
Test report on the application of the Linde fog removal equipment at the Erding air base --- Germany
[DLR-IB-75/8] p0145 N78-14763
Airport surface traffic control visual ground aids engineering and development plan
[AD-A038153] p0196 N78-16037
A tandem-queue algorithm for evaluating overall airport capacity
p0202 N78-16741
A simulation model for an enplaning-passenger-vehicle curbside at high-volume airports
p0239 N78-18020
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Benefit-cost evaluation of an intra-regional air service in the Bay area
[NASA-CR-152084] p0256 N78-19082
Simulation and development possibilities of the manual control concept in the near range and control zone
p0304 N78-20104
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Airport and aircraft noise reduction
[GPO-91-591] p0326 N78-21891
Bibliography: Airports
[AD-A049879/0] p0354 N78-22116
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
Airport activity statistics of certificated route air carriers
[AD-A052728] p0395 N78-24102
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports
[UTIAS-TN-216] p0403 N78-24755
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
Calculations of maximum A-weighted sound levels dBA --- single aircraft noise levels in airport vicinities
p0460 N78-27872
TRSB microwave landing system demonstration program at Buenos Aires, Argentina
[AD-A054451] p0489 N78-28071
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
Impact of FAA R and D elements: Eight airport summary
[AD-A054245] p0489 N78-28077
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
TRSB microwave landing system demonstration program at Brussels, Belgium
[AD-A054298] p0546 N78-30075
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport
[TT-7705] p0556 N78-30910
A comparison of annoyance caused by aircraft noise near London, Manchester and Liverpool airports
[TT-7706] p0557 N78-30911
TRSB microwave landing system demonstration program at Kristiansand, Norway
[AD-A055317] p0559 N78-31071
TRSB microwave landing system demonstration program at Charleroi, Belgium
[AD-A055920] p0559 N78-31072
Parameters of future ATC systems relating to airport capacity/delay
[AD-A055482] p0566 N78-31130
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
Vortex advisory system simulation of Chicago O'Hare Airport
[AD-A057112] p0625 N78-33069
Airport noise. A bibliography with abstracts
[NTIS/PS-78/0807/4] p0634 N78-33639
AIRSHIPS
185 W/kg solar array for naval sea control systems
p0002 A78-10964
Feasibility of modern airships - Preliminary assessment
p0050 A78-13416
Comments on 'Feasibility study of a hybrid airship operating in ground effect'
p0188 A78-24367
A rigid airship concept for future naval operations
[AIAA PAPER 77-1195] p0333 A78-34014

Lighter-than-air concepts and recent developments
p0386 A78-39395
Airships - The next generation and beyond
p0386 A78-39396
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
A solar airship - More than a flight of fancy --- solar cell powered transport aircraft
p0469 A78-44226
Aerodynamic and hovering control of LTA vehicles --- airship configurations
[AD-A045315] p0082 N78-12047
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-76/3] p0137 N78-14002
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta --- hull temperature, flight data, operational problems
[DLR-IB-536-77/1] p0238 N78-18012
An experimental and analytical investigation of the hovering and forward flight characteristics of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091
The technology assessment of LTA aircraft systems --- hybrid airships for passenger and cargo transportation
[NASA-TM-75535] p0603 N78-32043
Lighter than air vehicles. Citations from the engineering index data base
[NTIS/PS-78/0410/7] p0607 N78-32073

AIRSPACE
Aircraft separation in the controlled airspace of the United States --- ATC systems
p0059 A78-15250
The helicopter operators' viewpoint --- airspace operational environments and requirements
p0594 A78-52955
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028

AIRSPEED
Airspeed control under wind shear conditions
p0071 A78-16185
A new analysis method for determination of FAA stall speed
p0124 A78-19440
Prediction of the ascending speeds of gliders in thermal convection over a plain
p0177 A78-23398
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115
Air speed and attitude probe
[NASA-CASE-FRC-11009-1] p0408 N78-25088
A preliminary study of the benefits of flying by ground speed during final approach
[NASA-TM-78777] p0608 N78-32076

AIRWORTHINESS
U AIRCRAFT RELIABILITY

AIRWORTHINESS REQUIREMENTS
U AIRCRAFT RELIABILITY

ALARMS
U WARNING SYSTEMS

ALASKA
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075

ALCOHOLS
NT PHENOLS

ALGEBRA
NT BINOMIALS
NT CANONICAL FORMS
NT EIGENVALUES
NT EIGENVECTORS
NT HERMITIAN POLYNOMIAL
NT LINEAR EQUATIONS
NT MATRICES (MATHEMATICS)
NT NONLINEAR EQUATIONS
NT POLYNOMIALS
NT STIFFNESS MATRIX
NT VECTORS (MATHEMATICS)
NT VORTICITY

ALGORITHMS
Automated channel and trough-shaped surface design system algorithm --- for aircraft
p0049 A78-13174
A root locus property of the extended Bass algorithm
p0053 A78-14349
Airborne defensive fire control algorithms
p0063 A78-15627
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
A comparison of three computerized design algorithms for control systems --- for missle and aircraft autopilots
p0107 A78-17527
Tandem-queue algorithm for airport user flows
p0284 A78-30677
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
A tandem-queue algorithm for evaluating overall airport capacity
p0202 N78-16741
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
Supersonic flow-around of thin bodies with Mach number close to unity
[AD-A051884] p0358 N78-23059
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055

ALIGNMENT
ALIDADE - The alignment on board aircraft carriers of the inertial navigation units of Super-Etendard aircraft
p0217 A78-25149
Alignment of inertial navigation units on the Super-Etendard aircraft carrier
p0342 A78-35895
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched

missiles
p0534 A78-49929
ALIPHATIC COMPOUNDS
NT HYDRAZINES
NT METHANE
NT PROPANE
NT URETHANES
ALKANES
NT METHANE
NT PROPANE
ALL-WEATHER AIR NAVIGATION
Helicopter TF radar Pavelow III
p0068 A78-15697
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
ALL-WEATHER LANDING SYSTEMS
The victory of the frequency-reference beam over the Doppler MLS at AWOP 6 --- MLS for all-weather conditions
p0115 A78-18664
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
Landing aircraft under poor conditions
p0525 A78-49549
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Airborne equipment for all weather operations
p0570 A78-50448
AWLS operational flight test
[AD-A043814] p0037 N78-11050
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Experimental testing of flight control head up displays
[NASA-TM-75205] p0208 N78-17053
Inertially-aided, all-weather landing systems for C/TOL
p0356 N78-23017
Steep gradient approach systems research for all-weather operations
p0432 N78-26062
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0433 N78-26069
ALLOYS
NT ALUMINUM ALLOYS
NT BERYLLIUM ALLOYS
NT BRONZES
NT CAST ALLOYS
NT CHROMIUM ALLOYS
NT COBALT ALLOYS
NT EUTECTIC ALLOYS
NT HASTELLOY (TRADEMARK)
NT HEAT RESISTANT ALLOYS
NT HIGH STRENGTH ALLOYS
NT HIGH STRENGTH STEELS
NT INCONEL (TRADEMARK)
NT LIGHT ALLOYS
NT MARAGING STEELS
NT NICKEL ALLOYS
NT STAINLESS STEELS
NT STEELS
NT TERNARY ALLOYS
NT TITANIUM ALLOYS
NT TUNGSTEN ALLOYS
Identification of material for AN, MS, and AS engine and propeller standard utility parts and also for company parts
[SAE AS 269G] p0471 A78-44680
ALMUCANTAR
U ELEVATION ANGLE
ALOUETTE HELICOPTERS
NT SE-3160 HELICOPTER
ALOUETTE 3 HELICOPTER
U SE-3160 HELICOPTER
ALPHA JET AIRCRAFT
Simulation in the development of the training and ground-attack aircraft Alpha Jet
p0289 A78-31943
Alpha Jet - A European aircraft production program with a great future
p0470 A78-44616
Alpha Jet - A great leap forward --- overview of lightweight fighter-bomber
p0470 A78-44617
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
ALPHANUMERIC CHARACTERS
Development of a programmable panel
[AD-A048469] p0258 N78-19098
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
ALTERATION
U REVISIONS
ALTERNATING CURRENT GENERATORS
U AC GENERATORS
ALTERNATORS (GENERATORS)
U AC GENERATORS
ALTIMETERS
New-generation barometric altimeters
p0053 A78-14086
Use of NS LX1600A as a short-range altimeter
p0273 A78-28880
Differential altimetry for satellite orbit determination
p0289 A78-31915
Problems in world-wide standardization of the units of altitude measurement
[PB-277982/5] p0454 N78-27119
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
ALTITUDE
NT FLIGHT ALTITUDE
NT HIGH ALTITUDE
NT LOW ALTITUDE
Problems in world-wide standardization of the units of height measurement
[AD-A051150] p0402 N78-24385
ALTITUDE CONTROL
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075
ALTITUDE TESTS
NT HIGH ALTITUDE TESTS
Altitude test of several afterburner configurations on a turbofan engine with a hydrogen heater to simulate an elevated turbine discharge temperature
[NASA-TP-1068] p0041 N78-11106
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
ALUMINUM
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
The macroscopic detection of corrosion in aluminum aircraft structures with thermal neutron beams and film imaging methods
[PB-277074/1] p0364 N78-23214
Interaction of thick film dielectric, conductor, and alumina substrate for DC0201 aircraft controller
[SAND-78-0069] p0493 N78-28349
ALUMINUM ALLOYS
Engineering aluminum alloys for subsonic airframes
p0053 A78-14087
A close look at 7475 and 2024 aluminum for aircraft structures
p0108 A78-17699
Problems of rating the life of aircraft design elements in random loading
p0133 A78-20402

Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Fracture analysis of aerospace metals
p0175 A78-22724
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
The strength of structures and the applications of the fracture mechanics
p0178 A78-23574
C-141A service experience - Materials and processes
p0219 A78-25207
Structural castings for aircraft - A progress report from Boeing
p0232 A78-28370
Alloy needs and design - The airframe
p0285 A78-30856
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
A method of predicting stress corrosion cracking
p0468 A78-44105
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513
Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
Cast Aluminum Structures Technology (CAST)
[AD-A043469] p0045 N78-11236
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3799] p0143 N78-14158
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
Metal technology for future aircraft design
p0550 N78-30115
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197

ALUMINUM BOROHYDRIDES
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104

ALUMINUM BORON COMPOSITES
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
Boron-aluminum composite materials
p0130 A78-20146
Boron aluminum composite materials
[AAAF-NT-77-38] p0355 N78-22170

ALUMINUM COMPOUNDS
NT ALUMINUM BOROHYDRIDES
NT ALUMINUM NITRIDES

ALUMINUM HYDRIDES
NT ALUMINUM BOROHYDRIDES

ALUMINUM NITRIDES
New materials in the Si-C-Al-O-N and related systems --- for gas turbine and high temperature applications
p0601 A78-53864

AMBIENT TEMPERATURE
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158

AMPERAGE
U ELECTRIC CURRENT

AMPHIBIOUS AIRCRAFT
Tri-Gull amphibian development
p0233 A78-28460

AMPHIBIOUS VEHICLES
NT AMPHIBIOUS AIRCRAFT

AMPLIFICATION
NT POWER GAIN

AMPLIFIERS
NT FLUID AMPLIFIERS

AN-24 AIRCRAFT
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273

ANALOG CIRCUITS
Analog versus digital null-steering controllers
p0227 A78-27039

ANALOG COMPUTERS
NT UNIVAC 1100 SERIES COMPUTERS
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097

ANALOG DATA
Analog to digital airplanes - One easy step
[AIAA 77-1469] p0005 A78-12228

ANALOG SIMULATION
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109

ANALOGIES
NT HYDRAULIC ANALOGIES

ANALYSIS (MATHEMATICS)
NT APPROXIMATION
NT ASYMPTOTIC SERIES
NT COMBINATORIAL ANALYSIS
NT COMPLEX VARIABLES
NT CONFORMAL MAPPING
NT DIFFERENTIAL EQUATIONS
NT ERROR ANALYSIS
NT EXTREMUM VALUES
NT FINITE DIFFERENCE THEORY
NT FINITE ELEMENT METHOD
NT FOURIER ANALYSIS
NT FUNCTIONAL ANALYSIS
NT GREEN FUNCTION
NT HARMONIC ANALYSIS
NT INTEGRAL EQUATIONS
NT INTEGRAL TRANSFORMATIONS
NT INTERPOLATION
NT KERNEL FUNCTIONS
NT LEAST SQUARES METHOD
NT LINEAR EQUATIONS
NT MEASURE AND INTEGRATION
NT MEROMORPHIC FUNCTIONS
NT MINIMA
NT MONTE CARLO METHOD
NT NONLINEAR EQUATIONS
NT NUMERICAL ANALYSIS
NT NUMERICAL INTEGRATION
NT ORTHOGONAL FUNCTIONS
NT RELAXATION METHOD (MATHEMATICS)
NT SINGULAR INTEGRAL EQUATIONS
NT SINGULARITY (MATHEMATICS)
NT VORTICITY

ANALYTIC GEOMETRY
NT HYPERBOLAS
NT SPHEROIDS

ANCHORS (FASTENERS)
Coatings for aircraft which operate in marine environments

p0468 A78-44113
ANECHOIC CHAMBERS
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
High velocity jet noise source location and reduction. Task 1 supplement: Certification of the General Electric jet noise anechoic test facility
[AD-A042327/7] p0031 N78-10119
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
ANEMOMETERS
NT HOT-FILM ANEMOMETERS
NT HOT-WIRE ANEMOMETERS
NT LASER ANEMOMETERS
A digital continuously updated two minute mean windspeed indicator for use at airports
p0213 N78-17598
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
ANEMOMETRY
U VELOCITY MEASUREMENT
ANGLE OF ATTACK
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
Pressure distribution over sharp-nosed cones situated at angles of attack from 0 to 10 degrees in supersonic flow
p0165 A78-20889
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
Determination of high attitude wall corrections in a low speed wind tunnel
[AIAA 78-810] p0296 A78-32364
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
Boundary layers in axisymmetric inlets at angle of attack. I - Measurements
[AIAA PAPER 78-1109] p0522 A78-48499
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
Theoretical and experimental analysis of longitudinal and lateral aerodynamic characteristics of skewed wings at subsonic speeds to high angles of attack
[NASA-TN-D-8512] p0093 N78-13015
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed --- based on potential theory
[BMVG-FBWT-77-15] p0238 N78-18013
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
An experimental investigation of steady asymmetric vortex shedding from a slender body of revolution at high angles of attack
[AD-A048370] p0253 N78-19062
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
High angle canard missile test in the Ames 11-foot transonic wind tunnel
[NASA-CR-2993] p0405 N78-25057
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
High argle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft
[NASA-TM-78530] p0603 N78-32044
Angle detector
[NASA-CASE-ARC-11036-1] p0616 N78-32395
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121
ANGLES (GEOMETRY)
NT ANGLE OF ATTACK
NT ELEVATION ANGLE
NT LOOK ANGLES (TRACKING)
ANGULAR MOTION
U ANGULAR VELOCITY
ANGULAR RESOLUTION
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
ANGULAR VELOCITY
Generalized algorithm of the analytical method of gyrocompassing
p0216 A78-25013
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
Diverse forms and derivations of the equations of motion of deformable aircraft and their mutual relationship
[RAE-TR-77077] p0548 N78-30097
ANHYDRIDES
NT PEROXIDES
ANIMALS
NT INSECTS
ANNULAR FLOW
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
Performance of the Vortex-Controlled Diffuser /VCD/ in an annular combustor flowpath
p0572 A78-50574

ANNULAR NOZZLES
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
Calculating the interaction of a turbulent near wake behind a step and a supersonic jet
p0230 A78-28057
Calculation of interaction of a turbulent near-wake behind a step with a supersonic jet
p0480 A78-46092
ANNULAR PLATES
Experimental verification of an annular aerofoil theory
p0230 A78-27938
Aerodynamics of the annular wing
p0379 A78-38475
ANNULI
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
An annular wing
[NASA-CASE-FRC-11007-1] p0253 N78-19055
ANODIC COATINGS
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
ANTENNA ARRAYS
NT ENDFIRE ARRAYS
NT LINEAR ARRAYS
NT STEERABLE ANTENNAS
NT YAGI ANTENNAS
Optimal aperture-shape for an antenna array --- for radio navigation of flight vehicles
p0228 A78-27406
The optimum shape of the aperture of an antenna array --- for radio navigation of aircraft
p0598 A78-53257
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391
Analysis of monopole antenna arrays on cylinders by the geometrical theory of diffraction
[AD-A055197] p0567 N78-31335
ANTENNA DESIGN
Ku Band linear phased array
p0003 A78-11821
High performance antenna assembly --- for aircraft communication with satellite
p0062 A78-15588
Experimental analysis and selection of airborne antennas for aircraft-to-satellite communication systems
p0122 A78-19140
Null steering antennas in the tactical scenario
p0226 A78-27037
The ABEILLE electronic scanning antenna --- for fighter aircraft fire control radar
p0338 A78-35050
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247
A high-power switching network for a dual-mode antenna --- for airborne transmitter application
p0383 A78-38844
Communication and navigation antennas for aircraft --- Russian book
p0522 A78-48523
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
Antenna fairings for flight vehicles /2nd revised and enlarged edition/ --- Russian book
p0598 A78-53426
Multiband antenna system for tactical aircraft
[AD-A049699] p0325 N78-21363
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
ANTENNA FIELDS
U ANTENNA RADIATION PATTERNS
ANTENNA RADIATION PATTERNS
Ku Band linear phased array
p0003 A78-11821
High performance antenna assembly --- for aircraft communication with satellite
p0062 A78-15588
Flight measurement of aircraft onboard antennas
p0115 A78-18504
Special problems in the determination of the radiation characteristics of antennas on aircraft and satellites with the aid of geometric diffraction theory
p0288 A78-31582
Current and scattering field of a long short-circuited receiving vibrator --- aircraft antenna compatibility
p0339 A78-35467
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
RF radiation characteristics of the RH-53D helicopter and the Mark 105 AMCM system
[AD-A049795] p0325 N78-21358
Multiband antenna system for tactical aircraft
[AD-A049699] p0325 N78-21363
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
ANTENNAS
NT AIRCRAFT ANTENNAS
NT CYLINDRICAL ANTENNAS
NT DIPOLE ANTENNAS
NT DIRECTIONAL ANTENNAS
NT HELICAL ANTENNAS
NT MICROWAVE ANTENNAS
NT MONOPOLE ANTENNAS
NT MONOPULSE ANTENNAS
NT PARABOLIC ANTENNAS
NT RADAR ANTENNAS
NT RADIO ANTENNAS
NT SATELLITE ANTENNAS
NT SPACECRAFT ANTENNAS
NT STEERABLE ANTENNAS
NT YAGI ANTENNAS
EMC antennas and antenna factors - How to use them
[SAE AIR 1509] p0472 A78-44703
ANTIFRICTION BEARINGS
NT BALL BEARINGS
NT ROLLER BEARINGS
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DET-33] p0135 A78-20598
Estimating the service life of rolling contact bearings when synthetic oils are used --- in aircraft gas turbine engines
p0334 A78-34324
ANTIOXIDANTS
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
ANTISUBMARINE WARFARE AIRCRAFT
NT P-3 AIRCRAFT
NT S-3 AIRCRAFT
NT SH-3 HELICOPTER

ANTITANK MISSILES
Braiding composites - Adapting the process for the mass production of aerospace components
p0077 A78-16904
ANTONOV AIRCRAFT
NT AN-24 AIRCRAFT
The An-26 aircraft: Construction and use --- Russian book
p0283 A78-30273
ANTONOV AN-24 AIRCRAFT
U AN-24 AIRCRAFT
APERTURES
Optimal aperture-shape for an antenna array --- for radio navigation of flight vehicles
p0228 A78-27406
The optimum shape of the aperture of an antenna array --- for radio navigation of aircraft
p0598 A78-53257
The internal fields coupled through apertures
p0036 N78-11035
APPLICATIONS OF MATHEMATICS
Real-gas version of the gasdynamic formulas of Saint-Venant and Wantzel
p0570 A78-50304
Gesellschaft fuer angewandte Mathematik und Mechanik, Annual Scientific Meeting, Lyngby, Denmark, May 31-June 3, 1977, Reports. Part 2
p0583 A78-51151
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
APPROACH
NT INSTRUMENT APPROACH
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
VALT parameter identification flight test --- VTOL Approach and Landing Technology
p0480 A78-45439
Effects of landing approach methods and separation intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
APPROACH AND LANDING TESTS (STS)
1977 report to the aerospace profession; Proceedings of the Twenty-first Symposium, Beverly Hills, Calif., October 12-15, 1977
p0232 A78-28451
YC-14 flight test program
p0233 A78-28458
Shuttle carrier aircraft flight tests
p0234 A78-28464
APPROACH CONTROL
NT RADAR APPROACH CONTROL
The effect of radar disturbances on aircraft runway arrival time in a four-dimensional navigation terminal approach
[AIAA 77-1512] p0007 A78-12257
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
System requirements for transition from enroute to approach guidance
p0370 A78-36453
Soviet landing aid draws FAA scrutiny --- laser approach guidance
p0381 A78-38773
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
Guidance and control problems in semiautomatic recovery of the Aguila RPV
[AIAA 78-1272] p0540 A78-50182
Approach guidance logic for a tilt-rotor aircraft
[AIAA 78-1295] p0542 A78-50202
A more fully Automated En Route ATC system
p0595 A78-52959
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
An approach guidance system for remotely-piloted vehicles
[AD-A041561] p0022 N78-10043
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
Wind models for flight simulator certification of landing and approach guidance and control systems
p0268 N78-19723
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
Optimal control theory (OWEN) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
Steep gradient approach systems research for all-weather operations
p0432 N78-26062
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
Project plan for joint FAA/NASA head-up display concept evaluation
[NASA-TM-78512] p0495 N78-28979
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
A preliminary study of the benefits of flying by ground speed during final approach
[NASA-TM-78777] p0608 N78-32076
APPROACH INDICATORS
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
Development of a frangible approach light
[AD-A043859] p0043 N78-11122
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043785] p0354 N78-22117
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
APPROXIMATION
NT FINITE DIFFERENCE THEORY
NT FINITE ELEMENT METHOD
NT LEAST SQUARES METHOD
NT RELAXATION METHOD (MATHEMATICS)
Chordwise variation of vorticity - A comparison of approximations for use in panel methods --- solution to Laplace equation for wing-body configurations
p0130 A78-20194
Approximate method of calculating subsonic compressible flows past a lifting wing profile
p0164 A78-20883
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Construction of higher approximations in the problem of special flows in plane Laval nozzles
p0426 A78-42764
Construction of airfoil profiles approximating a given profile
p0485 A78-46588

Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387
Approximate dynamic model of a turbojet engine
[NASA-TM-75263] p0264 N78-19159
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
A distributed vortex method for computing the vortex field of a missile
[NASA-TP-1183] p0405 N78-25058

APPROXIMATION METHODS
U APPROXIMATION

ARC HEATING
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759

ARC WELDING
NT GAS TUNGSTEN ARC WELDING
NT PLASMA ARC WELDING

ARCHITECTURE
Glass airports --- building design
p0570 A78-50434
The 4m x 2m industrial aerodynamics wind tunnel
[OUEL-1188/77] p0100 N78-13085

ARCHITECTURE (COMPUTERS)
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246
DAIS - Design and performance --- Digital Avionics Information System
[AIAA 77-1499] p0006 A78-12247
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
Digital avionic communication --- computer system design to improve intereguipment transmission
p0068 A78-15694
Solution of multitarget, multisensor tracking problems on the Illiac IV parallel processor
p0113 A78-18063
MIL-STD-1553B proposed --- data bus development in avionic architecture
p0531 A78-49866
Digital system architecture for a 1980's jammer --- for military aircraft and ships
p0537 A78-49973
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
Specialized computer architectures for computational aerodynamics
p0270 N78-19814

ARCTIC REGIONS
Nansen-Drift Station Project: Remote sea-ice runway construction
[AD-A054720] p0503 N78-29113

AREA NAVIGATION
Multi-system position determination - An innovative approach to low cost area navigation
[AIAA 77-1513] p0007 A78-12258
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
Inertially aided scanning DME for area navigation
p0110 A78-17899
Jeppesen charting for area navigation
p0370 A78-36454
New model VOR/DME
p0373 A78-37246
RNAV - Corporate operators set the pace
p0509 A78-47424
Area navigation - Fast-time/real-time simulations in a high-altitude center environment
p0596 A78-52977
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
High-altitude area navigation (RNAV) enroute simulation
[AD-A049316] p0257 N78-19088
Area navigation systems and procedures
p0316 N78-21091

ARGENTINA
TRSB microwave landing system demonstration program at Buenos Aires, Argentina
[AD-A054451] p0489 N78-28071

ARIP (IMPACT PREDICTION)
U COMPUTERIZED SIMULATION
U IMPACT PREDICTION

ARKANSAS
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas --- ground based control
[AD-A053938] p0452 N78-27106

ARMED FORCES
NT ARMED FORCES (FOREIGN)
NT ARMED FORCES (UNITED STATES)
NT NAVY

ARMED FORCES (FOREIGN)
German Army helicopter development and prospects for the future
p0261 N78-19128
Canadian Navy experience with small ship helicopter operations
p0261 N78-19129

ARMED FORCES (UNITED STATES)
The multirole cruise missile
p0600 A78-53716
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
Projected needs of US Army Aviation
p0261 N78-19127
The US Army OTTAS and AAH programs
p0262 N78-19131
Encyclopedia of US Air Force aircraft and missile systems. Volume 1: Post-World War II fighters 1945 - 1973
[AD-A057002] p0622 N78-33036

ARMOR
Increasing the survivability of combat aircraft
[AD-A045910] p0140 N78-14038

ARRAYS
NT ANTENNA ARRAYS
NT ENDFIRE ARRAYS
NT LINEAR ARRAYS
NT PHASED ARRAYS
NT SOLAR ARRAYS
NT STEERABLE ANTENNAS
NT YAGI ANTENNAS
Analysis of single and double coverage aircraft multispectral scanner arrays for positional data
p0267 N78-19553

ARRESTING GEAR
Metallurgical behavior of arresting gear deck pendants
p0218 A78-25185

ARROW WINGS
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
Effect of a simulated engine jet blowing above an arrow wing at Mach 2.0
[NASA-TP-1050] p0020 N78-10030
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration, task 3
[NASA-CR-145192] p0305 N78-20112
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2825] p0306 N78-20116
Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
Low-speed aerodynamic characteristics from wind-tunnel tests of a large-scale advanced arrow-wing supersonic-cruise transport concept
[NASA-CR-145280] p0312 N78-21053
Stability and performance characteristics of a fixed arrow wing supersonic transport

configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95 --- Langley Unitary Plan wind tunnel tests
[NASA-TM-78706] p0604 N78-32050
Effects of wing leading-edge deflection on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration
[NASA-TM-78787] p0622 N78-33047

ARTHROPODS
NT INSECTS

ARTIFICIAL SATELLITES
NT AEROSAT SATELLITES
NT ATS 5
NT ATS 6
NT COMMUNICATION SATELLITES
NT EOSS
NT GEODETIC SATELLITES
NT GEOS SATELLITES (ESA)
NT MARITIME SATELLITES
NT MAROTS (ESA)
NT METEOROLOGICAL SATELLITES
NT NAVIGATION SATELLITES
NT NAVSTAR SATELLITES
NT TRANSIT SATELLITES

ASCENT
NT CLIMBING FLIGHT

ASCENT PROPULSION SYSTEMS
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502

ASCENT TRAJECTORIES
Some aspects of the problem of flights in ascent
p0119 A78-19041
Strategic positioning and traffic regulation in the terminal zone
p0217 A78-25150

ASDE
U AIRPORT SURFACE DETECTION EQUIPMENT

ASPECT RATIO
NT HIGH ASPECT RATIO
NT LOW ASPECT RATIO
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
Unsteady pressure distribution measurements at two trapezoidal wings with unit aspect ratio
p0205 N78-17020

ASSEMBLIES
NT TAIL ASSEMBLIES

ASSEMBLING
NT ORBITAL ASSEMBLY
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291

ASSESS PROGRAM
Assess II - A simulated mission of Spacelab
p0569 A78-50276

ASSESSMENTS
NT TECHNOLOGY ASSESSMENT
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620

ASTRIONICS
NAECON '78; Proceedings of the National Aerospace and Electronics Conference, Dayton, Ohio, May 16-18, 1978. Volumes 1, 2 & 3
p0529 A78-49851

ASTRODYNAMICS
Spacecraft flight control systems --- Russian book
p0599 A78-53434

ASTRONAUT PERFORMANCE
Safety of space flights
p0516 A78-47952

ASYMMETRY
Calculations of flows in flat asymmetric nozzles for overexpanded conditions
p0581 A78-50782

ASYMPTOTIC METHODS
Asymptotic theory of the swept wing
p0052 A78-14053
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025

ASYMPTOTIC SERIES
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649

ASYNCHRONOUS MOTORS
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345

ATHODYDS
U RAMJET ENGINES

ATLIT PROJECT
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065

ATMOSPHERIC ABSORPTION
U ATMOSPHERIC ATTENUATION

ATMOSPHERIC ATTENUATION
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles --- of ground-to-aircraft wideband data links
p0592 A78-52360
Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements --- computer program
[AD-A051700] p0403 N78-24899

ATMOSPHERIC BOUNDARY LAYER
A flight path correlation technique for assessing the impact of turbulence in the atmospheric boundary layer on aircraft during the landing approach
p0055 A78-14961
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Some characteristics of sonic boom propagation in an inhomogeneous atmosphere
p0128 A78-19691
Preliminary comparison of model and prototype wakes --- building wake effects on atmospheric boundary layer
[AIAA PAPER 78-254] p0162 A78-20774
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
Numerical study on the stability dependence of geostrophic drag and cross-isobar angle
p0580 A78-50691
Research on various aspects of atmospheric flight
[AD-A033681] p0202 N78-20088
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711

ATMOSPHERIC CHEMISTRY
Simulation of airport air quality by box photochemical and Gaussian models
p0216 A78-25033
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816

ATMOSPHERIC CIRCULATION
Environmental aerodynamics --- Book
p0332 A78-33802
Numerical study on the stability dependence of geostrophic drag and cross-isobar angle
p0580 A78-50691
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
Overview of NASA/Marshall Space Flight Center's program on knowledge of atmospheric processes
p0267 N78-19714
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified

lake conditions
[AD-A050614] p0354 N78-22120
ATMOSPHERIC COMPOSITION
NT IONOSPHERIC COMPOSITION
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
[NASA-TM-78983] p0558 N78-31061
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618
ATMOSPHERIC CONDITIONS
U METEOROLOGY
ATMOSPHERIC DIFFUSION
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
ATMOSPHERIC EFFECTS
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Atmospheric Flight Mechanics Conference, Palo Alto, Calif., August 7-9, 1978, Technical Papers
p0482 A78-46526
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
ATMOSPHERIC ELECTRICITY
Protection of systems avionics against atmospheric electricity hazards - Lightning and static electricity
p0065 A78-15652
ATMOSPHERIC ENTRY
NT HYPERSONIC REENTRY
Operational experience in the Langley expansion tube with various test gases --- for atmospheric entry simulation
[NASA-TM-78637] p0152 N78-15060
ATMOSPHERIC ENTRY SIMULATION
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
A technique for simulating turbulence for aerospace vehicle flight simulation studies
[NASA-TM-78141] p0079 N78-12014
ATMOSPHERIC HEATING
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
ATMOSPHERIC IMPURITIES
U AIR POLLUTION
ATMOSPHERIC MODELS
NT BREADBOARD MODELS
NT DYNAMIC MODELS
Simulation of airport air quality by box photochemical and Gaussian models
p0216 A78-25033
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
A non-Gaussian gust model for aircraft response analysis
[NOR-76-223] p0265 N78-19165
Wind models for flight simulator certification of landing and approach guidance and control systems
p0268 N78-19723
ATMOSPHERIC PRESSURE
New-generation barometric altimeters
p0053 A78-14086
Atmospheric pressure jumps measured with arrays of sensitive pressure sensors in the vicinity of Chicago's O'Hare International Airport
[PB-277518/7] p0356 N78-22551
ATMOSPHERIC RADIATION
Aircraft measurements of the spatial fluctuation characteristics of atmospheric radio emission at wavelengths of 0.8 and 1.35 cm
p0229 A78-27721
ATMOSPHERIC REFRACTION
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
ATMOSPHERIC TEMPERATURE
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
Estimated temperature corrections for the Menaka-II meteorological rocket payload
p0479 A78-45341
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
ATMOSPHERIC TURBULENCE
NT CLEAR AIR TURBULENCE
NT GUSTS
NT LOW LEVEL TURBULENCE
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Atmospheric turbulence loads on aircraft
p0175 A78-23049
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave
p0188 A78-24356
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
Aircraft motions in moving air
p0425 A78-42449
A technique for simulating turbulence for aerospace vehicle flight simulation studies
[NASA-TM-78141] p0079 N78-12014
An exposition on aircraft response to atmospheric turbulence using power spectral density analysis techniques
[AD-A046108] p0143 N78-14057
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
Characterization of nonGaussian atmospheric turbulence for prediction of aircraft response statistics
[NASA-CR-2913] p0197 N78-16044
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
Overview of NASA/Marshall Space Flight Center's program on knowledge of atmospheric processes
p0267 N78-19714
Airplane design for gusts
p0267 N78-19717
A non-stationary model for atmospheric turbulence patches for the prediction of aircraft design loads
[NLR-TR-76131-U] p0361 N78-23085
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft

[BNL-23633] p0460 N78-27711
Gust measurements and the N sub o problem
p0554 N78-30276
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106
ATOMIC CLOCKS
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
ATOMIC EXPLOSIONS
U NUCLEAR EXPLOSIONS
ATOMIZATION
U ATOMIZING
ATOMIZERS
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
ATOMIZING
Effect of airstream velocity on mean drop diameters of water sprays produced by pressure and air atomizing nozzles --- for combustion studies
p0329 A78-33111
ATS
NT ATS 5
NT ATS 6
ATS 5
Results of the NASA/MARAD L-band satellite navigation experiment
p0375 A78-37525
ATS 6
Results of the NASA/MARAD L-band satellite navigation experiment
p0375 A78-37525
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
ATTACHMENTS
U ACCESSORIES
ATTACK AIRCRAFT
NT A-4 AIRCRAFT
NT A-6 AIRCRAFT
NT A-7 AIRCRAFT
NT A-10 AIRCRAFT
NT A-37 AIRCRAFT
NT AH-64 HELICOPTER
NT ALPHA JET AIRCRAFT
NT B-1 AIRCRAFT
NT B-52 AIRCRAFT
NT B-57 AIRCRAFT
NT BOMBER AIRCRAFT
NT F-4 AIRCRAFT
NT F-5 AIRCRAFT
NT F-8 AIRCRAFT
NT F-14 AIRCRAFT
NT F-15 AIRCRAFT
NT F-16 AIRCRAFT
NT F-17 AIRCRAFT
NT F-18 AIRCRAFT
NT F-27 AIRCRAFT
NT F-100 AIRCRAFT
NT F-101 AIRCRAFT
NT F-102 AIRCRAFT
NT F-106 AIRCRAFT
NT F-111 AIRCRAFT
NT FIGHTER AIRCRAFT
NT FV-12A AIRCRAFT
NT JAGUAR AIRCRAFT
NT P-1127 AIRCRAFT
NT SAAB 37 AIRCRAFT
NT YF-12 AIRCRAFT
NT YF-16 AIRCRAFT
The attack helicopter Hughes YAH-64
p0003 A78-12035
Design considerations for ECM systems in attack and fighter aircraft
p0054 A78-14928
Testing a modern strike aircraft navigation system
p0175 A78-22852
YAH-64 advanced attack helicopter design tradeoffs
[SAE PAPER 770950] p0178 A78-23801
Sensitivity studies for several high performance VSTOL concepts
[SAE PAPER 770982] p0180 A78-23822
Simulation tests of anti-flak profiles --- aircraft flight optimization for ground attack mission
p0290 A78-31951
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
COMED - The cockpit display of the future --- COmbined Map and Electronic Display
p0508 A78-47268
Software structured weapon delivery
p0532 A78-49875
Flight controls of Army/Hughes YAH-64 advanced attack helicopter
[AIAA 78-1237] p0540 A78-50160
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363 --- visual display training simulator devices
[AIAA 78-1580] p0579 A78-50661
Simultaneous sensor-presentation techniques study --- for attack aircraft
[AD-A043355] p0024 N78-10066
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
ATTENUATION
NT ACOUSTIC ATTENUATION
NT ATMOSPHERIC ATTENUATION
NT MICROWAVE ATTENUATION
NT RADIO ATTENUATION
ATTITUDE (INCLINATION)
NT PITCH (INCLINATION)
NT ROLL
NT YAW
Movement of a tilted wing near a screen
[AD-A045920] p0144 N78-14347
ATTITUDE CONTROL
NT DIRECTIONAL CONTROL
NT LATERAL CONTROL
NT LONGITUDINAL CONTROL
NT THRUST VECTOR CONTROL
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
The effect of thrust vectoring and attitude control concepts on the propulsion system of V/STOL aircraft
[AIAA PAPER 78-1020] p0520 A78-48481
Bank-to-turn /BIT/ autopilot technology --- for missiles
p0534 A78-49927
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
A learning flight control system for the F8-DFBW aircraft --- Digital Fly-By-Wire
[AIAA 78-1288] p0542 A78-50195
Aircraft compensator design methods
[AD-A047814] p0210 N78-17073
Large scale static tests of a tilt-nacelle V/STOL propulsion/attitude control system
[NASA-CR-152181] p0611 N78-32098
Nonlinear rolling motion analysis of a Canard-controlled missile configuration at angles of attack from 0 to 30 degrees in incompressible flow
[AD-A056695] p0631 N78-33132
ATTITUDE INDICATORS
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
Twoway - A position and orientation measurement system --- helicopter/VTOL landing aid application
p0525 A78-49661
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045
Aircraft attitude measurement using a vector magnetometer
[NASA-CR-155565] p0207 N78-17050
Air speed and attitude probe
[NASA-CASE-FRC-11009-1] p0408 N78-25088
ATTITUDE STABILITY
NT DIRECTIONAL STABILITY

NT LATERAL STABILITY
NT LONGITUDINAL STABILITY
Flight test of stick force stability in attitude-stabilized aircraft
[NLR-MP-77015-U] p0246 N78-18080
AUDIO EQUIPMENT
NT MICROPHONES
AUDIO VISUAL EQUIPMENT
U TRAINING DEVICES
U VISUAL AIDS
AUDIOMETRY
Research into effects of aircraft noise on hearing of children in exposed residential areas around an airport
p0117 A78-18779
AUDITORY TASKS
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
AUGMENTATION
NT STABILITY AUGMENTATION
NT THRUST AUGMENTATION
Glide path augmentation with inertial flight path angle
[AD-A046363] p0149 N78-15025
AUTOCOLLIMATORS
U COLLIMATORS
AUTOCORRELATION
Improved aircraft tracking using maneuver statistics enroute and in the terminal area
p0316 N78-21087
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
AUTOMATA THEORY
Analytical design of an automaton for the longitudinal control of an aircraft
p0292 A78-32262
AUTOMATIC CONTROL
NT ADAPTIVE CONTROL
NT AUTOMATIC FLIGHT CONTROL
NT AUTOMATIC GAIN CONTROL
NT AUTOMATIC LANDING CONTROL
NT CASCADE CONTROL
NT DYNAMIC CONTROL
NT FEEDBACK CONTROL
NT NUMERICAL CONTROL
NT OFF-ON CONTROL
NT OPTIMAL CONTROL
NT PROPORTIONAL CONTROL
NT SELF ADAPTIVE CONTROL SYSTEMS
NT TIME OPTIMAL CONTROL
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
Use of the singular perturbation method to investigate automatic control systems --- for automatic pilot
p0163 A78-20802
Six degrees of freedom system for store separation studies in ONERA wind-tunnels
[ONERA, TP NO. 1977-100] p0191 A78-24460
Use of a stepping motor for measuring fuel quantity in a digital system for control of rotational speed
p0277 A78-29586
A reliable modular automatic system adapted to avionics controls: Design through successive refinements - Production --- French book
p0281 A78-30024
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
Automation in transportation in 1990 --- overview
p0416 A78-40867
Digital area correlation tracker
p0536 A78-49951
The ARTS III Umbrella - Concepts and applications --- for collecting and distributing aircraft positional data within ATC radar coverage areas
p0594 A78-52958
Concept and future plans for automation of air traffic control in the Federal Republic of Germany
p0596 A78-52972
Optimal control of aircraft powerplant --- Russian book
p0597 A78-53119
Automated meteorological data from commercial aircraft via satellite: Present experience and future implications
[NASA-TM-73750] p0212 N78-17558
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
AUTOMATIC CONTROL VALVES
NT PRESSURE REGULATORS
NT RELIEF VALVES
AUTOMATIC DATA PROCESSING
U DATA PROCESSING
AUTOMATIC FLIGHT CONTROL
NT AUTOMATIC LANDING CONTROL
Digital avionics, active controls, and the FAA - Advanced integrated flight systems /AIFS/
[AIAA 77-1503] p0006 A78-12250
Integration, installation, and flight test of a fail passive digital automatic flight control system in a jet transport aircraft
[AIAA 77-1514] p0008 A78-12259
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
Dual device redundancy management --- for RPV automatic flight control computer reliability
[AIAA 77-1441] p0015 A78-12695
Automatic control of airplanes and helicopters --- Russian book
p0015 A78-12849
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Integrity in flight control systems
p0182 A78-23873
Integrated flight control system for future transport aircraft
[DGLR PAPER 77-035] p0190 A78-24425
From analog to digital control systems - Improved performance by means of advanced technology --- used for commercial aircraft
[DGLR PAPER 77-036] p0190 A78-24426
Mission management in the airport vicinity --- digital flight control for terminal maneuvering area
[DGLR PAPER 77-037] p0190 A78-24427
Automatic airspace --- automatic flight control of terminal configured vehicle for ATS
p0273 A78-28834
Observability criteria for nonlinear dynamic systems subjected to multiparameter measurements --- noting air navigation applicability
p0274 A78-29089
Fly-by-wire flight control
p0280 A78-29935
New trends and problem areas in automatic flight control
p0282 A78-30252
Analytical design of an automaton for the longitudinal control of an aircraft
p0292 A78-32262
Fully-automated, pilot-monitored air traffic control
p0373 A78-37155
Avionics first principles. IV - Automatic flight control
p0480 A78-45926

Design and development of a multifunctional helicopter control system
p0524 A78-49396
In-line monitoring of digital flight control computers
p0531 A78-49860
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
The evolution of a remotely piloted vehicle microprocessor flight control system
[AIAA 78-1273] p0541 A78-50183
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
Close encounters of the aeroservoelastic kind --- aerodynamics, structural dynamics, and automatic flight control systems for aircraft design applications
[AIAA 78-1289] p0542 A78-50196
The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
Study of the application of an implicit model-following flight controller to lift-fan VTOL aircraft
[NASA-TP-1040] p0199 N78-16063
Design of noninteracting flight control systems in the presence of large parameter variations
[NASA-CR-155589] p0200 N78-16064
Heavy lift helicopter flight control system. Volume 3: Automatic flight control system development and feasibility demonstration
[AD-A050059] p0324 N78-21164
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0433 N78-26066
Control system design using vector-valued performance criteria with application to the control rate reduction in parameter insensitive control systems
[DLR-FB-77-55] p0565 N78-31125

AUTOMATIC GAIN CONTROL
Automatic low frequency gain limiting for A-C coupled signal processing systems --- thermal imaging
p0054 A78-14938

AUTOMATIC LANDING CONTROL
Automatic system employing radioactive radiation to level-out an aircraft at landing
p0216 A78-25011
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074

AUTOMATIC PATTERN RECOGNITION
U PATTERN RECOGNITION

AUTOMATIC PILOTS
Design and implementation of mode control logic in digital autopilots
[AIAA 77-1488] p0005 A78-12238
A multifunctional guidance and control system --- for CCV F-104G aircraft
p0064 A78-15640
A comparison of three computerized design algorithms for control systems --- for missle and aircraft autopilots
p0107 A78-17527
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- applied to STOL autopilot design
p0114 A78-18464
Use of the singular perturbation method to investigate automatic control systems --- for automatic pilot
p0163 A78-20802
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- application to Augmentor Wing Jet STOL Research Aircraft flare control autopilot design
p0184 A78-23917
A simplified instrument failure detection scheme
p0481 A78-46377
Bank-to-turn /BIT/ autopilot technology --- for missiles
p0534 A78-49927
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059

AUTOMATIC ROCKET IMPACT PREDICTORS
U COMPUTERIZED SIMULATION
U IMPACT PREDICTION

AUTOMATIC TEST EQUIPMENT
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer --- Joint Tactical Information Distribution System for TDMA digital communication and navigation
[AIAA 77-1415] p0014 A78-12677
An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
Sound separation probes for flowing duct noise measurements --- jet engine diagnostics
p0106 A78-17396
Recent developments in automatic testing
p0108 A78-17663
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
A programmable display test unit
p0417 A78-40917
ATE and avionics display systems
p0417 A78-40924
Fault isolation in environmental control systems of commercial transports
[SAE AIR 1266] p0472 A78-44696
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
F-15 avionics Built-in-Test
p0539 A78-49991
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109

AUTOMATIC WEATHER STATIONS
A current weather information display system for use at airports
p0213 N78-17600

AUTOMATION
Automated channel and trough-shaped surface design

system algorithm --- for aircraft
p0049 A78-13174
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
Improved safety in air transportation through the extension and automation of flight safety systems
p0569 A78-50264
A more fully Automated En Route ATC system
p0595 A78-52959

AUTOMOBILE ENGINES
Review of the development of small- and medium-capacity gas turbines at the Motoren- und Turbinen Union
[DGLR PAPER 77-061] p0116 A78-18702
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
The development of a regenerator seal for vehicular use --- for automatic gas turbine engines
p0574 A78-50587
Aluminous keatite - A durable ceramic material for rotary regenerator cores --- for automotive gas turbine engines
p0574 A78-50588
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592
Development of the experimental gas turbine bus
p0575 A78-50601
A development of advanced radial gas turbine for automobile
p0575 A78-50603
A research on centrifugal compressor for small gas turbine - The effect of recirculating flow --- automobile engines
p0576 A78-50612
Development of ceramic components for an automotive gas turbine
p0578 A78-50632
An overview of aerospace gas turbine technology of relevance to the development of the automotive gas turbine engine
[NASA-TM-73849] p0098 N78-13062
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053

AUTOMOBILES
High-temperature ceramics for automobile gas turbines
[NASA-TM-75457] p0614 N78-32264
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600

AUTOPILOTS
U AUTOMATIC PILOTS

AUTOROTATION
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113

AUXILIARY POWER SOURCES
Aircraft auxiliary power units --- Russian book
p0377 A78-37885
LACV-30 auxiliary power unit investigation
[AD-A053566] p0492 N78-28277
Independent power generator
[NASA-CASE-LAR-11208-1] p0617 N78-32539

AUXILIARY PROPULSION
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084

AV-8A AIRCRAFT
U HARRIER AIRCRAFT

AVIATION
U AERONAUTICS

AVIATORS
U AIRCRAFT PILOTS

AVIONICS
Digital Avionics Systems Conference, 2nd, Los Angeles, Calif., November 2-4, 1977, Collection of Technical Papers and Supplement
p0004 A78-12226
Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Analog to digital airplanes - One easy step
[AIAA 77-1469] p0005 A78-12228
Digital avionics overview airframe manufacturers' update
[AIAA 77-1470] p0005 A78-12229
FAA role of certification - Advanced aircraft systems
[AIAA 77-1472] p0005 A78-12230
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Airline viewpoint on systems development and integration --- avionics information processing
[AIAA 77-1496] p0006 A78-12244
A new concept in integrated reference systems --- avionics cost reduction
[AIAA 77-1497] p0006 A78-12245
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246
DAIS - Design and performance --- Digital Avionics Information System
[AIAA 77-1499] p0006 A78-12247
An approach to system integration /BASIC/ --- Basic Avionic Subsystem Integration Concept for Navy weapons system program
[AIAA 77-1500] p0006 A78-12248
Digital avionics, active controls, and the FAA - Advanced integrated flight systems /AIFS/
[AIAA 77-1503] p0006 A78-12250
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251
Flight experience with a fail-operational digital fly-by-wire control system
[AIAA 77-1507] p0007 A78-12253
Avionics for the discrete address beacon system /DABS/
[AIAA 77-1511] p0007 A78-12256
Integration, installation, and flight test of a fail passive digital automatic flight control system in a jet transport aircraft
[AIAA 77-1514] p0008 A78-12259
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
Digital real time simulation of the F-5E/F flight director computer
[AIAA 77-1528] p0008 A78-12267
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
The role of cockpit simulators in the integration of pilot/controller ATC system related avionics and procedures
[AIAA 77-1516] p0010 A78-12284
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
A-6E TRAM --- Target Recognition Attack Multisensor system retrofit for all-weather operations
p0051 A78-13650
Design considerations for ECM systems in attack and fighter aircraft
p0054 A78-14928
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948

Reversing the trend of cockpit complexity with smart displays --- for helicopters
p0059 A78-15381
A contractor's perception of design to life cycle cost
p0060 A78-15553
Life cycle costing, a design tool - Nuances and caveats
p0060 A78-15554
Life cycle testing for avionics development
p0060 A78-15557
Aircraft avionics cooling, present and future
p0060 A78-15558
Advanced environmental control for avionic systems
p0060 A78-15559
Environmental tests and logistics support costs
p0061 A78-15560
Development of a combined environment test for reliability assessment of avionics systems
p0061 A78-15561
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
The relationship between simulation and flight test
p0062 A78-15586
The F-16 sampled data assembly
p0063 A78-15618
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics
p0064 A78-15636
Compatibility testing and integration of DAIS multiplex bus equipments --- Digital Avionics Information System
p0064 A78-15638
AN/ARN-101 test and evaluation --- data management techniques for Digital Modular Avionics System
p0065 A78-15644
Microprocessor controlled testing of Air Data Computers
p0065 A78-15649
Modeling of Air Data Computers in test system software
p0065 A78-15650
Protection of systems avionics against atmospheric electricity hazards - Lightning and static electricity
p0065 A78-15652
High-voltage power supply problems and design techniques
p0065 A78-15654
Fiber optic data buses for avionics - A systems view
p0066 A78-15656
Stores management and data bus systems --- for F-16 aircraft
p0066 A78-15660
Microprocessor realization of the bus interface unit for a distributed avionic computer system
p0066 A78-15661
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
Visually Activated Switching System --- using helmet-mounted IR transmitter for avionics control
p0067 A78-15669
Digital avionic communication --- computer system design to improve interequipment transmission
p0068 A78-15694
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
Shop test success is a function of the airborne system design --- F-16 weapon avionics
p0068 A78-15699
A Flight Line Computer Loader/Test Controller for improved avionic maintenance
p0068 A78-15701
A flexible approach to on-board computer simulation
p0068 A78-15706
Keeping pace with avionics innovations --- data processing in navigation and tracking
p0069 A78-15712
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
The digital airplane --- military avionics
p0126 A78-19547
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976
An evaluation of weight optimization of aircraft radioelectronic equipment
p0174 A78-22646
Integrity in flight control systems
p0182 A78-23873
Coming cockpit avionics
p0231 A78-28220
A reliable modular automatic system adapted to avionics controls: Design through successive refinements - Production --- French book
p0281 A78-30024
Mirage 2000 --- French flighter aircraft design characteristics, SNECMA M53 engine and avionics
p0288 A78-31755
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
Practical experience in vibration testing external avionics systems
p0292 A78-32134
The role of avionics in modern aircraft
p0328 A78-32651
FAA's certification position on advanced avionics
p0335 A78-34642
Early warning aircraft
p0342 A78-35898
Applications of new visualization techniques to on-board equipment
p0343 A78-35974
Modern RF system design for aircraft --- tactical information exchange system
p0373 A78-37341
Electronic aircraft collision avoidance system --- Russian book
p0376 A78-37603
The F-4E Austere HUD/Gunsight project
p0380 A78-38746
Jaguar and Tornado avionic development testing
p0380 A78-38748
The determination of margins of safety for critical aircraft systems --- electromagnetic interference effects on flight and engine controls
p0384 A78-39082
Filtering techniques in avionic transmitters
p0384 A78-39084
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
EMC control of the tornado aircraft
p0384 A78-39087
A programmable display test unit
p0417 A78-40917
ATE and avionics display systems
p0417 A78-40924
Avionics first principles. IV - Automatic flight control
p0480 A78-45926
Experimental determination of a more powerful burn-in
p0481 A78-46321
Advances in inertial navigation
p0509 A78-47481
AIDS in military aircraft --- Airborne Integrated Data Systems Computer
p0510 A78-47866
Flight deck display trends
p0510 A78-47899
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
Evaluating avionics weight efficiency
p0518 A78-48228
Highly survivable integrated avionics
p0523 A78-49163
LOGMOD - The fault-isolator --- for helicopter electronic systems
p0523 A78-49239
Design of a horizontal tail unit and related adjustments

p0527 A78-49736
Aviation control system devices --- Russian book
p0529 A78-49850
NAECON '78; Proceedings of the National Aerospace and Electronics Conference, Dayton, Ohio, May 16-18, 1978. Volumes 1, 2 & 3
p0529 A78-49851
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
A qualitative analysis of redundant asynchronous operation
p0531 A78-49863
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
MIL-STD-1553B proposed --- data bus development in avionic architecture
p0531 A78-49866
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
A hierarchical network for avionic systems
p0532 A78-49868
Multiprocessing for electronic warfare avionics
p0532 A78-49869
Interface design considerations for F-16 sensors and weapons
p0532 A78-49874
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900
Digital avionics support - A retrospective view of the future
p0533 A78-49903
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
The DAIS Executive - An introduction --- avionics computer software
p0534 A78-49932
Multi-Function Inertial Reference Assembly /MIRA/ update --- digital aircraft systems
p0535 A78-49941
The versatility of Jovial J73 in avionics systems
p0536 A78-49956
Higher order languages for avionics software - A survey, summary and critique
p0536 A78-49959
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
The AN/APX-100/V/ transponder --- for military aircraft
p0537 A78-49971
Digital system architecture for a 1980's jammer --- for military aircraft and ships
p0537 A78-49973
F-15 avionics Built-in-Test
p0539 A78-49991
A flight qualified graphics generator --- for B-1 defense system
p0539 A78-50007
Applications for airborne digital communications
p0590 A78-51896
Avionics maintenance study
[AD-A042568] p0017 N78-10003
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
Preliminary Candidate Advanced Avionics System (PCAAS) --- reduction in single pilot workload during instrument flight rules flight
[NASA-CR-152026] p0024 N78-10061
Improving reliability of avionics equipments through engineering testing
[AD-A042454] p0024 N78-10064
Microwave landing system utilization and conventional avionics
[AD-A044297] p0083 N78-12055
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
EMC analysis of the proposed AEROSAT VHF subsystem with current inband communications systems. Volume 2: Worldwide
[AD-A043904] p0090 N78-12281
Engineering evaluation tests of 20-ampere airborne battery charger (breadboard) manufactured by Sunstrand Corporation
[AD-A045011] p0090 N78-12342
Avionics and the MFCA
p0141 N78-14046
Specifications for IDAMST software --- for short takeoff aircraft avionics
[AD-A047163] p0198 N78-16049
Evaluation of STOL navigation avionics
[NASA-CR-155566] p0208 N78-17051
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060
F-4E avionics update
[AD-A047949] p0243 N78-18061
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
Palefac
[AD-A048331] p0244 N78-18065
Modular packaging approaches
[AD-A048205] p0249 N78-18321
Multi-variate optimization problems of flight vehicle synthesis
[PB-276123/7] p0318 N78-21103
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981
General aviation avionics equipment maintenance
[NASA-CR-145342] p0398 N78-24132
On setting avionic subsystem unit production cost goals --- contract management and procurement policy
[AD-A051337] p0398 N78-24133
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
Avionics planning guidance: Executive summary
[AD-A054719] p0500 N78-29098
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074
Avionics cost development for alternatives of selected air traffic control systems
[AD-A054823] p0547 N78-30080
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report
[AD-A054016] p0550 N78-30119
Program analyses for the S-3 weapon system improvement program
[AD-A055887] p0561 N78-31093
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120
Avionics performance analysis: A historical review and a current assessment of flight instrumentation and control systems in civil aviation
[NASA-CR-145378] p0610 N78-32094
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330

Operational Software Concept OSC executive evaluation/refinement
[AD-A055902] p0618 N78-32754
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097
Standard modular power supplies for avionics
[AD-A057159] p0627 N78-33100

AVOIDANCE
NT COLLISION AVOIDANCE

AWACS AIRCRAFT
NT E-3A AIRCRAFT
NT E-4A AIRCRAFT

AXES (COORDINATES)
U COORDINATES

AXES (REFERENCE LINES)
NT AXES OF ROTATION

AXES OF ROTATION
Diverse forms and derivations of the equations of motion of deformable aircraft and their mutual relationship
[RAE-TR-77077] p0548 N78-30097

AXIAL COMPRESSORS
U TURBOCOMPRESSORS

AXIAL FLOW
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
Amplification of distortions in an axial compressor stage
p0046 N78-11983
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038

AXIAL FLOW COMPRESSORS
U TURBOCOMPRESSORS

AXIAL FLOW PUMPS
Double row radial hydraulic piston pumps for aircraft hydraulic systems
p0598 A78-53249

AXIAL FLOW TURBINES
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297
Flow in a hydraulic model of an axial turbomachine
[ONERA, TP NO. 1977-157] p0075 A78-16619
Aerodynamic behavior of an axial-flow compressor in the presence of inflow disturbances
[DGLR PAPER 77-064] p0116 A78-18706
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
Calculation of transonic flow through a turbine cascade by the time-step method
p0379 A78-38248
Boundary layer development on axial-flow turbomachinery blading
p0468 A78-43863
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118
Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109

AXIAL LOADS
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262

AXISYMMETRIC BODIES
Potential flow around axisymmetric bodies - Direct and inverse problems
p0223 A78-26230
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309

AXISYMMETRIC FLOW
NT ANNULAR FLOW
Stratford's turbulent separation criterion for axially-symmetric flows
p0002 A78-11635
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
Small perturbation theory for supersonic jets
[AIAA PAPER 78-1151] p0421 A78-41851
Numerical study of flow in axisymmetric Laval nozzles, taking account of overexpansion with flow separation
p0429 A78-43114
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor --- in aircraft design
p0481 A78-46354
The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118

AXLES
U SHAFTS (MACHINE ELEMENTS)

AZIMUTH
Airborne antenna coverage requirements for the TCV B-737 aircraft --- for operation with microwave landing systems
[NASA-TM-78647] p0153 N78-15325

A2F AIRCRAFT
U A-6 AIRCRAFT

A4D AIRCRAFT
U A-4 AIRCRAFT

B

B-1 AIRCRAFT
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
Low-cost composite primary structure --- for B-1 aircraft vertical stabilizer
p0069 A78-15855
Design problems associated with the B-1 Composite Horizontal Stabilizer
p0109 A78-17890
B-1 progress report
p0125 A78-19446
B-1 terrain following
p0125 A78-19447
B-1 terrain following development
p0233 A78-28456
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
B-1 flight test progress report
[AIAA PAPER 78-1448] p0511 A78-47903
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
A flight qualified graphics generator --- for B-1 defense system
p0539 A78-50007
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087
B-1 terrain-following development
p0432 N78-26061
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
B-1 EMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092
B-52 AIRCRAFT
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
B-57 AIRCRAFT
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
BAC AIRCRAFT
NT CANBERRA AIRCRAFT
BACKGROUND NOISE
Problems of noise certifying business aircraft
p0015 A78-12824
Annoyance due to the interaction of community noise sources
p0634 N78-33613
BACKSCATTERING
Automatic system employing radioactive radiation to level-out an aircraft at landing
p0216 A78-25011
BALANCING
Search-method optimization of the balancing of flexible rotors of gas turbine engines
p0581 A78-50795
BALL BEARINGS
Natural vibrations of a rigid rotor mounted on elastic ball bearings
p0582 A78-51015
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
BALLISTIC RANGES
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
BALLISTIC TRAJECTORIES
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
Magnus effects on ballistic trajectories
[AD-A048966] p0254 N78-19071
BALLISTICS
Hypersonic heat transfer test program in the VKI longshot facility --- ogive body configuration
[AD-A050295] p0302 N78-20086
BALLOON FLIGHT
Scientific ballooning in India --- for stratospheric cosmic ray measurements
p0113 A78-18182
The use of long-duration balloons for scientific research
p0113 A78-18184
BALLOONS
NT HIGH ALTITUDE BALLOONS
NT METEOROLOGICAL BALLOONS
NT SKYHOOK BALLOONS
NT SUPERPRESSURE BALLOONS
NT TETHERED BALLOONS
Lighter than air vehicles. Citations from the engineering index data base
[NTIS/PS-78/0410/7] p0607 N78-32073
BANDPASS FILTERS
NT TRACKING FILTERS
BANDWIDTH
NT BROADBAND
Effect of digitally computed drives on performance of continuous linear systems
[NASA-TN-D-8518] p0022 N78-10045
BANG-BANG CONTROL
U OFF-ON CONTROL
BANKING FLIGHT
U TURNING FLIGHT
BARDEEN APPROXIMATION
U SURFACE PROPERTIES
BAROMETERS
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
BAROMETRIC PRESSURE
U ATMOSPHERIC PRESSURE
BARS
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
BARYCENTER
U CENTER OF GRAVITY
BASE FLOW
Calculating the interaction of a turbulent near wake behind a step and a supersonic jet
p0230 A78-28057
Calculation of interaction of a turbulent near-wake behind a step with a supersonic jet
p0480 A78-46092
BASE PRESSURE
External drag and base pressure of fuselage tail sections of various configuration
p0128 A78-19683
Computation of the base pressure in ejector nozzles of different length with zero coefficient of ejection
p0168 A78-21098
Sting effects as determined by the measurement of pitch-damping derivatives and base pressures at Mach number 3
[AIAA 78-830] p0297 A78-32381
Two different theoretical approaches to the base pressure problem in two-dimensional supersonic flow
p0600 A78-53767
Influence of rarefaction and compression waves on base pressure
p0600 A78-53781
Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and

comparison with other data
[NASA-TM-72855] p0405 N78-25055
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134
BATHYMETERS
Airborne Oceanographic Lidar System
p0053 A78-14878
BATHYMETRY
U BATHYMETERS
BATTERY CHARGERS
Engineering evaluation tests of 20-ampere airborne battery charger (breadboard) manufactured by Sunstrand Corporation
[AD-A045011] p0090 N78-12342
BATTERY SEPARATORS
U SEPARATORS
BAYES THEOREM
Failure state detection of aircraft engine output sensors
p0184 A78-23906
BAYESIAN STATISTICS
U BAYES THEOREM
BCAS
U BEACON COLLISION AVOIDANCE SYSTEM
BEACON COLLISION AVOIDANCE SYSTEM
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
BEACONS
NT AIRPORT BEACONS
NT DISCRETE ADDRESS BEACON SYSTEM
NT OMNIDIRECTIONAL RADIO RANGES
NT RADAR BEACONS
NT RADIO BEACONS
NT RADIO DIRECTION FINDERS
Some test results concerning visibility of obstacle and hazard beacons
p0280 A78-29907
Engineering and development program plan: Discrete Address Beacon System (DABS)
[AD-A057122] p0625 N78-33073
BEAM RIDER GUIDANCE
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074
BEAM SWITCHING
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
BEAMS (RADIATION)
NT ELECTRON BEAMS
NT LIGHT BEAMS
NT NEUTRON BEAMS
NT PARTICLE BEAMS
BEAMS (SUPPORTS)
NT BOX BEAMS
NT CANTILEVER BEAMS
NT TIMOSHENKO BEAMS
Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
Damping, static, dynamic, and impact characteristics of laminated beams typical of windshield construction
[AD-A054463] p0548 N78-30093
BEARING (DIRECTION)
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
BEARINGLESS ROTORS
Bearingless tail rotor loads and stability
[AD-A049579] p0317 N78-21098
BEARINGS
NT ANTIFRICTION BEARINGS
NT BALL BEARINGS
NT JOURNAL BEARINGS
NT ROLLER BEARINGS
NT THRUST BEARINGS
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648
Emergency and microfog lubrication and cooling of bearings for Army helicopters
[NASA-CR-135195] p0459 N78-27429
Dynamic analysis of flexible rotor-bearing systems using a model approach
p0616 N78-32424
BEAT
U SYNCHRONISM
BELGIUM
TRSB microwave landing system demonstration program at Charleroi, Belgium
[AD-A055920] p0559 N78-31072
BELL AIRCRAFT
NT UH-1 HELICOPTER
NT X-22 AIRCRAFT
NT XV-15 AIRCRAFT
The Bell Model 222 --- twin engine executive transport helicopter
[SAE PAPER 770951] p0179 A78-23802
The Bell Model 222
p0263 N78-19138
BENCHES
U SEATS
BENDING
NT ELASTIC BENDING
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
Determination of bending stresses in a spur gear tooth
[RAE-LIB-TRANS-1923] p0504 N78-29452
BENDING MOMENTS
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
An experimental study to determine the reduction in ultimate bending moment of a composite plate due to an internal delamination
[AD-A052662] p0411 N78-25466
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
BENDING THEORY
Experimental study on blade bending vibration
[CUED/A-TURBO/TR-88] p0361 N78-23090
BENDING VIBRATION
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
BERNOULLI EQUATION
U BERNOULLI THEOREM
BERNOULLI THEOREM
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
BERYLLIUM
Beryllium 1977; International Conference, 4th, London, England, October 4-7, 1977, Conference Preprints

p0472 A78-44706
Beryllium in aircraft brakes - A summary
p0473 A78-44736
BERYLLIUM ALLOYS
Beryllium 1977; International Conference, 4th, London, England, October 4-7, 1977, Conference Preprints
p0472 A78-44706
BIBLIOGRAPHIES
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
Environmental Pollution. Noise pollution-noise effects on human performance
[AD-A041600] p0145 N78-14691
Bibliography of Lewis Research Center technical contributions announced in 1976
[NASA-TM-73860] p0213 N78-17921
Bibliography: Airports
[AD-A049879/0] p0354 N78-22116
Parachutes and decelerators, volume 2. A bibliography with abstracts
[NTIS/PS-78/0320] p0406 N78-25067
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NTIS/PS-78/0239] p0410 N78-25099
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091
Flow visualization, volume 1. A bibliography with abstracts
[NTIS/PS-78/0425/5] p0458 N78-27379
Flow visualization, volume 2. A bibliography with abstracts
[NTIS/PS-78/0426/3] p0459 N78-27380
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
Bibliography of Lewis Research Center technical publications announced in 1977
[NASA-TM-78918] p0496 N78-28986
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
Lighter than air vehicles. Citations from the engineering index data base
[NTIS/PS-78/0410/7] p0607 N78-32073
Air traffic congestion and capacity. A bibliography with abstracts
[NTIS/PS-78/0598/9] p0609 N78-32085
Air pollution emission factors: A bibliography with abstracts
[NTIS/PS-78/0548/4] p0617 N78-32604
Bird strikes and aviation safety. A bibliography with abstracts
[NTIS/PS-78/0694/6] p0624 N78-33066
Closed loop control systems. Part 1: Aircraft. A bibliography with abstracts
[NTIS/PS-78/0809/0] p0630 N78-33122
Closed loop control systems. Part 2: Miscellaneous applications. A bibliography with abstracts
[NTIS/PS-78/0810/8] p0632 N78-33278
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600
Urban noise pollution. A bibliography with abstracts
[NTIS/PS-78/0686/2] p0634 N78-33634
Airport noise. A bibliography with abstracts
[NTIS/PS-78/0807/4] p0634 N78-33639
Fiber optics, volume 2. Citations from the NTIS data base
[NTIS/PS-78/0713/4] p0636 N78-33918
BINARY MIXTURES
NT EUTECTIC ALLOYS
NT EUTECTICS
BINARY SYSTEMS (DIGITAL)
U DIGITAL SYSTEMS
BINARY SYSTEMS (MATERIALS)
NT EUTECTIC ALLOYS
NT EUTECTICS
BINDERS (ADHESIVES)
U ADHESIVES
BINOMIALS
Multistatic-radar binomial detection
p0222 A78-26158
BIOACOUSTICS
USAF bioenvironmental noise data handbook. Volume 83: KC-135A aircraft, near and far-field noise
[AD-A054138] p0495 N78-28893
BIOPHYSICS
NT PUBLIC HEALTH
BIPLANES
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
BIRD-AIRCRAFT COLLISIONS
Brief ecological survey of airports and the bird hazard problem
p0115 A78-18666
How to make an airport unattractive to birds
p0275 A78-29209
Improved resistance to engine bird ingestion
[AD-A044203] p0041 N78-11105
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
Bird strikes and aviation safety. A bibliography with abstracts
[NTIS/PS-78/0694/6] p0624 N78-33066
BITUMENS
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
BLACKOUT (PROPAGATION)
NT ELECTROMAGNETIC NOISE
BLADE TIPS
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft
[NASA-TM-73816] p0102 N78-13854
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
ONERA aerodynamic research work on helicopters
p0264 N78-19148
Acoustical effects of blade tip shape changes on a full scale helicopter rotor in a wind tunnel
[NASA-CR-152082] p0311 N78-20918
In-place recalibration technique applied to a capacitance-type system for measuring rotor blade tip clearance
[NASA-TP-1110] p0352 N78-22101
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
Full-scale testing of an Ogee tip rotor --- in the Langley whirl tower
p0620 N78-32830
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
BLADES
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
BLASIUS FLOW
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149

BLAST LOADS
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
BLASTS
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28494
BLEEDING
Fabrication and test of a fluidic fuel-control and bleed-air-load-control system for gas turbine engines
[AD-A049039] p0265 N78-19163
BLOCKING
Effect of blockage ratio on the turbulent near wake of a bluff body
p0224 A78-26489
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
BLOWDOWN WIND TUNNELS
A major refurbishing program for the NAE 5-ft. x 5-ft. blowdown wind tunnel
p0415 A78-40725
Application of cryogenics in experimental aerodynamics
p0522 A78-48982
BLOWERS
The aerodynamic design of blower tunnels with wide-angle diffusers
p0075 A78-16647
BLOWING
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
Contribution to the theory of three-dimensional hypersonic viscous gas flow past blunted bodies in the presence of injection
p0580 A78-50757
Calculations of the effects of blowing from the leading edges of a cambered delta wing
[ARC-R/M-3800] p0545 N78-30064
BLOWN FLAPS
U EXTERNALLY BLOWN FLAPS
BLUFF BODIES
An investigation into the effects of shear on the flow past bluff bodies
[AIAA PAPER 78-331] p0186 A78-24025
Effect of blockage ratio on the turbulent near wake of a bluff body
p0224 A78-26489
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
BLUNT BODIES
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies
p0186 A78-24096
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
Contribution to the theory of three-dimensional hypersonic viscous gas flow past blunted bodies in the presence of injection
p0580 A78-50757
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
Boundary layer over spinning blunt-body of revolution at incidence including magnus forces
[AD-A049199] p0255 N78-19072
BLUNT LEADING EDGES
The effect of blunting the leading edge of a delta wing on its aerodynamic characteristics during supersonic flight
p0166 A78-20920
BO-105 HELICOPTER
IDS - An advanced hingeless rotor system
p0372 A78-36950
BOATTAILS
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
A parametric investigation of the annular jet concept for obtaining afterbody drag data at transonic Mach numbers
[AD-A050891] p0345 N78-22032
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064
BODIES OF REVOLUTION
NT CONICAL BODIES
NT CYLINDRICAL BODIES
NT ROTATING CYLINDERS
NT SLENDER CONES
NT SPHERES
Potential flow around axisymmetric bodies - Direct and inverse problems
p0223 A78-26230
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
An experimental investigation of steady asymmetric vortex shedding from a slender body of revolution at high angles of attack
[AD-A048370] p0253 N78-19062
Boundary layer over spinning blunt-body of revolution at incidence including magnus forces
[AD-A049199] p0255 N78-19072
BODY-WING AND TAIL CONFIGURATIONS
The effect of aerodynamic interference of wing and horizontal tail assembly on the critical velocity of flutter of a flight vehicle
p0126 A78-19633
Machine algorithm for determining the cross sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109
BODY-WING CONFIGURATIONS
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses --- for Kfir aircraft
p0071 A78-16181
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload
p0128 A78-19693
The lifting force of a low-aspect-ratio wing and body combination
p0129 A78-19709
Chordwise variation of vorticity - A comparison of approximations for use in panel methods --- solution to Laplace equation for wing-body configurations
p0130 A78-20194

The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
Computational transonic flow about realistic aircraft configurations
[AIAA PAPER 78-104] p0172 A78-22576
Some special boundary layer problems /20th Ludwig Prandtl Memorial Lecture/ --- aircraft wing stall characteristics
p0176 A78-23295
Special problems in the development of the propulsion system for an over-the-wing engine configuration
[DGLR PAPER 77-046] p0190 A78-24435
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
The effect of over-the-wing nacelles on wing-body aerodynamics
[AIAA PAPER 78-1083] p0466 A78-43589
Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Generalized area rules and integral thecrems for hypersonic wing-bodies
p0571 A78-50461
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673
Application of hypersonic favorable aerodynamic interference concepts to supersonic aircraft
[AIAA PAPER 78-1458] p0591 A78-52042
Aerodynamic centre of wing-fuselage-nacelle combinations: Effect of wing-pylon mounted nacelles
[ESDU-77012] p0079 N78-12010
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed --- based on potential theory
[BMVG-FBWT-77-15] p0238 N78-18013
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
A study of the lift-to-drag ratio capability of caret wing waveriders
[AD-A053691] p0498 N78-29069
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052

BOEING AIRCRAFT
NT P-52 AIRCRAFT
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT BOEING 747 AIRCRAFT
NT C-135 AIRCRAFT
NT CH-47 HELICOPTER
NT CH-62 HELICOPTER
NT E-3A AIRCRAFT
NT E-4A AIRCRAFT
Boeing launches the 767
p0591 A78-52244

BOEING MILITARY AIRCRAFT
U MILITARY AIRCRAFT

BOEING 747B AIRCRAFT
U E-4A AIRCRAFT

BOEING 727 AIRCRAFT
TRSB microwave landing system demonstration program at Shiraz, Iran
[AD-A055526] p0625 N78-33071

BOEING 737 AIRCRAFT
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-145207] p0022 N78-10047
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-144984] p0044 N78-11199
Airborne antenna coverage requirements for the TCV B-737 aircraft --- for operation with microwave landing systems
[NASA-TM-78647] p0153 N78-15325

BOEING 747 AIRCRAFT
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
Flutter tests of the mated 747 Shuttle Carrier Aircraft-Orbiter
[SAE PAPER 770971] p0179 A78-23816
Shuttle carrier aircraft flight tests
p0234 A78-28464
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
Space shuttle separation mechanisms
[NASA-TM-58210] p0613 N78-32177

BOLKOW AIRCRAFT
NT BO-105 HELICOPTER

BOLTS
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262

BOMBER AIRCRAFT
NT A-4 AIRCRAFT
NT A-6 AIRCRAFT
NT B-1 AIRCRAFT
NT B-52 AIRCRAFT
NT B-57 AIRCRAFT

NT F-100 AIRCRAFT
Backfire - The bogeyman bomber --- Soviet strategic aircraft
p0116 A78-18699
P-1 FMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092
BOMBING EQUIPMENT
Test pilot report on the angle rate bombing system
p0055 A78-14946
Software structured weapon delivery
p0532 A78-49875
BOMBS (ORDNANCE)
A feasibility study of a manual bomb release while in a turn
[AD-A048882] p0261 N78-19123
BONDING
NT ADHESIVE BONDING
NT METAL BONDING
NT METAL-METAL BONDING
BOOMS (EQUIPMENT)
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
BOOST
U ACCELERATION (PHYSICS)
BORES
U CAVITIES
BOROHYDRIDES
NT ALUMINUM BOROHYDRIDES
BORON
Boron combustion in combinatory propulsion
[ESA-TT-462] p0365 N78-23258
BORON COMPOUNDS
NT ALUMINUM BOROHYDRIDES
NT BORON-EPOXY COMPOUNDS
BORON HYDRIDES
NT ALUMINUM BOROHYDRIDES
BORON REINFORCED MATERIALS
NT BORON-EPOXY COMPOUNDS
Application of composites on civil aircraft
p0218 A78-25199
Studies on reinforced plastics --- boron fiber composites
[AAAF-NT-77-40] p0355 N78-22240
Detectability of flaws in boron and carbon composite parts
p0444 N78-26477
The prospects for composites based on boron fibers
[NASA-TM-75305] p0457 N78-27185
BORON-EPOXY COMPOUNDS
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
Studies on reinforced plastics --- boron fiber composites
[AAAF-NT-77-40] p0355 N78-22240
BOSONS
NT LIGHT BEAMS
BOUNDARIES
NT FLUID BOUNDARIES
NT GAS-SOLID INTERFACES
BOUNDARY LAYER CONTROL
Wind tunnel experiments on a NACA 632-A215 wing profile with boundary layer control through blowing on the leading edge
p0121 A78-19075
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Wings with controlled separation
[DGLR PAPER 77-028] p0189 A78-24419
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572
Experiments on supercritical flows in a self-correcting wind tunnel
p0295 A78-32345
Boundary layer blowing tests on a radial diffuser in low and subsonic Mach range
p0374 A78-37411
A perspective of laminar-flow control --- aircraft energy efficiency program
[AIAA PAPER 78-1528] p0481 A78-46503
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
The attachment of a ventilated plane jet to an inclined plane wall
p0600 A78-53764
An assessment of circulation control airfoil development
[AD-A043826] p0033 N78-11012
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
Unsteady, surface pressure and near-wave hotwire measurements of a circulation control airfoil
[AD-A050025] p0313 N78-21061
Application of laminar flow control to large subsonic military transport airplanes
[AD-A052422] p0394 N78-24098
Laminar flow control overview
p0448 N78-27066
Development of advanced stability theory suction prediction techniques for laminar flow control --- on swept wings
p0449 N78-27068
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
Toward a laminar-flow-control transport
p0449 N78-27071
Application of porous materials for laminar flow control
p0449 N78-27072
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils
[AD-A055140] p0558 N78-31047
Evaluation of a circulation control tail boom for yaw control --- OH-6 helicopter
[AD-A055116] p0564 N78-31119
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
BOUNDARY LAYER EQUATIONS
Displacement thickness distributions in transonic flows about 3-D wings
p0108 A78-17612
Recent developments in numerical solutions for equations of the boundary layer in laminar and turbulent flow
p0118 A78-19030
Asymptotic theory of the onset of separation at a flap on a cooled body situated in hypersonic flow under conditions of weak hypersonic interaction
p0128 A78-19671
Turbulent boundary layer on a moving surface
p0163 A78-20850
Unsteady boundary layer with self-induced pressure
p0230 A78-28102
Three-dimensional boundary layer theory using shell geometrical concepts
p0584 A78-51176
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309
BOUNDARY LAYER FLOW
NT BOUNDARY LAYER SEPARATION
NT REATTACHED FLOW
NT SECONDARY FLOW
NT SEPARATED FLOW
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades

p0012 A78-12311
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Aerodynamic characteristics of a rectangular wing with a tip clearance in a channel
p0106 A78-17427
The computation of self-similar three-dimensional separated flows
p0127 A78-19657
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
An investigation of strut-wall intersection losses
[AIAA PAPER 78-205] p0161 A78-20743
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
An aerofoil with control surface in incompressible viscous flow
p0175 A78-23050
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
An analytic study of free molecule flow fields at the front and back edges of a plate
p0274 A78-28972
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402
Boundary layers in axisymmetric inlets at angle of attack. I - Measurements
[AIAA PAPER 78-1109] p0522 A78-48499
Film cooling of a gas turbine blade
p0573 A78-50580
Numerical implementation of solid-body boundary conditions for the Euler equations --- in fluid dynamics
p0584 A78-51175
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687
Movement of a tilted wing near a screen
[AD-A045920] p0144 N78-14347
Flow measurements behind a rotor operating in a boundary layer
[AD-A046359] p0148 N78-15012
Boundary layer over spinning blunt-body of revolution at incidence including magnus forces
[AD-A049199] p0255 N78-19072
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143
Boundary separation problems faced by aircraft designers
p0493 N78-28399
Evaluation of a circulation control tail boom for yaw control --- OH-6 helicopter
[AD-A055116] p0564 N78-31119
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
Inverse boundary-layer theory and comparison with experiment
[NASA-TP-1208] p0615 N78-32385

BOUNDARY LAYER NOISE
U AERODYNAMIC NOISE
U BOUNDARY LAYERS

BOUNDARY LAYER SEPARATION
Stratford's turbulent separation criterion for axially-symmetric flows
p0002 A78-11635
The prediction of two-dimensional airfoil stall progression
[AIAA PAPER 78-155] p0160 A78-20709
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
Some special boundary layer problems /20th Ludwig Prandtl Memorial Lecture/ --- aircraft wing stall characteristics
p0176 A78-23295
Some important physical phenomena in flows with separated turbulent boundary layers
p0336 A78-34839
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896
Turbulent boundary layer separation on a curved wall with normal compression shock
p0583 A78-51155
The stall problem
p0204 N78-17006
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
Separation problems encountered by aircraft designers CSS Div. des Etudes Avancees.
p0249 N78-18377
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
Prediction of the severity of buffeting --- wind tunnel tests
p0249 N78-18382
Some unsteady separation problems for slender bodies
p0249 N78-18383
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
Dynamic stall of an oscillating airfoil
p0346 N78-22055
Boundary separation problems faced by aircraft designers
p0493 N78-28399
Structure of turbulence in complex flows --- effects of unsteadiness and three dimensionality
p0494 N78-28407

BOUNDARY LAYER STABILITY
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Hypersonic flow of a viscous gas in a nozzle
p0127 A78-19651

Unsteady boundary layer with self-induced pressure
p0230 A78-28102
Calculation of airfoil drag
p0369 A78-36210
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Investigations of the intensity of oscillations of the boundary of a turbulent wake
p0586 A78-51402
On the nonstationary boundary layer with self-induced pressure at transonic external stream velocities
p0591 A78-52043
Research on unsteady turbulent boundary layers
p0146 N78-14992
Some unsteady separation problems for slender bodies
p0249 N78-18383
Analysis and design of a cooled supercritical airfoil test model --- wall temperature effect on boundary layer stability
[AD-A048895] p0265 N78-19168

BOUNDARY LAYER TRANSITION
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759
The next approximation after boundary layer theory --- machine blade associated unsteady flow effects
p0373 A78-37409
An experimental study of boundary layer transition on a caret wing at hypersonic speeds
p0417 A78-41029
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
Leading edge transition on swept wings
p0144 N78-14336
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19048

BOUNDARY LAYERS
NT ATMOSPHERIC BOUNDARY LAYER
NT COMPRESSIBLE BOUNDARY LAYER
NT HYPERSONIC BOUNDARY LAYER
NT INCOMPRESSIBLE BOUNDARY LAYER
NT LAMINAR BOUNDARY LAYER
NT SUPERSONIC BOUNDARY LAYERS
NT THERMAL BOUNDARY LAYER
NT THREE DIMENSIONAL BOUNDARY LAYER
NT TURBULENT BOUNDARY LAYER
NT TWO DIMENSIONAL BOUNDARY LAYER
Boundary layers in dissipative media
p0170 A78-22091
Boundary layer development on axial-flow turbomachinery blading
p0468 A78-43863
The prediction of viscous effects on aerofoils in transonic flow
p0478 A78-45237
Movement of a wing with a small aspect ratio near the interface of fluids with different densities
[AD-A045921] p0145 N78-14348
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
Methods and results of boundary layer measurements on a glider
[NASA-TM-75294] p0394 N78-24085
End-wall boundary layer prediction for axial compressors
[NASA-TM-78928] p0441 N78-26144
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064

BOUNDARY VALUE PROBLEMS
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
Tunnel interference assessment by boundary measurements
p0284 A78-30689
Second order transonic small perturbation flow
p0424 A78-42198
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673
Numerical implementation of solid-body boundary conditions for the Euler equations --- in fluid dynamics
p0584 A78-51175
Calculation of local three-dimensional supersonic fields
p0584 A78-51184
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case --- satellite and aircraft antennas
p0248 N78-18290
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case --- satellite and aircraft antennas
[ESA-TT-435] p0365 N78-23310

BOW SHOCK WAVES
U BOW WAVES
U SHOCK WAVES

BOW WAVES
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320

BOX BEAMS
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043

BRACKETS
Evaluation of F-16 radar attachment assemblies for reusable containers
[AD-A053424] p0459 N78-27432

BRAKES (FOR ARRESTING MOTION)
NT AERODYNAMIC BRAKES
NT AIRCRAFT BRAKES
NT LEADING EDGE SLATS
NT TRAILING-EDGE FLAPS
NT WHEEL BRAKES
NT WING FLAPS
Brake-plates for aeroplanes
[AD-A045932] p0143 N78-14150
Parachutes and decelerators, volume 2. A bibliography with abstracts

[NTIS/PS-78/0320] p0406 N78-25067
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Inspection of carbon fibre parts after fabrication and during service
p0444 N78-26476

BRAYTON CYCLE
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106

BRAZING
Diffusion brazing titanium sandwich structures
p0587 A78-51524
Nickel brazing honeycomb for aircraft gas turbine engines
p0600 A78-53751
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
Non-welding joining, cutting and thermal spraying methods
p0046 N78-11395
Weldbraze airframe components
[AD-A054042] p0504 N78-29457

BREADBOARD MODELS
Development of a breadboard system for recording ATC displays
p0595 A78-52964
Engineering evaluation tests of 20-ampere airborne battery charger (breadboard) manufactured by Sunstrand Corporation
[AD-A045011] p0090 N78-12342
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
Description of a model for evaluating operational performance of communications system
[AD-A057199] p0632 N78-33313

BREAKAWAY
U BOUNDARY LAYER SEPARATION

BRITTLENESS
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100

BROADBAND
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
Broadband noise in axial-fan blade cascade
p0579 A78-50650

BRONZES
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436

BUBBLES
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012

BUCKLING
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft
[NASA-CR-144863] p0310 N78-20534
Buckling of struts. Lipped and unlipped Z sections
[ESDU-77030] p0366 N78-23469
Shear buckling of corrugated plates with quasi-sinusoidal corrugations
p0616 N78-32458

BUFFETING
Flying aeroplanes in buffet
p0078 A78-17130
Prediction of the severity of buffeting --- wind tunnel tests
p0249 N78-18382
Flight-measured buffet characteristics of a supercritical wing and a conventional wing on a variable-sweep airplane
[NASA-TP-1244] p0358 N78-23056
Prediction of the severity of buffeting --- structural response to the aerodynamic excitation produced by separated flow
p0493 N78-28404
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118

BUILDING MATERIALS
U CONSTRUCTION MATERIALS

BUILDING STRUCTURES
U BUILDINGS

BUILDINGS
Preliminary comparison of model and prototype wakes --- building wake effects on atmospheric boundary layer
[AIAA PAPER 78-254] p0162 A78-20774
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NTIS/PS-78/0239] p0410 N78-25099
Experimental determination of the rattle of simple models
[NASA-TM-78756] p0555 N78-30291
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874

BULKHEADS
Structural castings for aircraft - A progress report from Boeing
p0232 A78-28370
Optimization of the structure of a multibulkhead large-aspect-ratio wing
p0293 A78-32275

BURNING
U COMBUSTION

BURNING PROCESS
U COMBUSTION

BURNING RATE
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297

BURNTHROUGH (FAILURE)
Experimental determination of a more powerful burn-in
p0481 A78-46321

BUS CONDUCTORS
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976

BYPASSES
Influence of structural components of a by-pass engine on its flight characteristics --- STOL aircraft

p0277 A78-29582
Evaluation of inlet reingestion for large bypass ratio V/STOL aircraft
[AIAA PAPER 78-1079] p0521 A78-48495
Operating characteristics of bypass turbojet engines --- Russian book
p0540 A78-50125
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
Comparison of the characteristics of bypass turbojet engine employing a small-size gas-turbine in the outer duct with those of a turbojet engine in supersonic cruising flight
p0581 A78-50790
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794

C

C BAND
Landing aircraft under poor conditions
p0525 A78-49549
C-5 AIRCRAFT
C-5 wing modification - Weight and design to cost status
p0110 A78-17897
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
C-9 AIRCRAFT
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
C-15 AIRCRAFT
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
YC-15 STOL performance flight test methods
p0125 A78-19445
YC-15 development and test highlights - Phase III
p0233 A78-28457
Overview of powered-lift technology --- as used on the YC-14 aircraft and C-15 aircraft
p0389 N78-24047
C-130 AIRCRAFT
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
C-135 AIRCRAFT
Electronic converter electric power supply /ECEPS/ - KC-135
[SAE PAPER 771003] p0181 A78-23837
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28
[NASA-TM-73250] p0079 N78-12011
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
C-140 AIRCRAFT
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
C-141 AIRCRAFT
C-141A service experience - Materials and processes
p0219 A78-25207
YC-14B prototype testing
p0233 A78-28459
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004
Military transport (C-141) fly-by-wire program
[AD-A046163] p0143 N78-14056
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
CABIN ATMOSPHERES
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
[NASA-TM-78983] p0558 N78-31061
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618
CABLES
Fabrication and assembly of cable strands for aircraft engines --- Russian book
p0599 A78-53432
CABLES (ROPES)
Deployment forces in towing systems --- by aircraft
p0188 A78-24365
Metallurgical behavior of arresting gear deck pendants
p0218 A78-25185
Design and development of helicopter external cargo sling legs made with Kevlar
[AD-A056951] p0626 N78-33093
CADASTRAL MAPPING
The ITC PHOTNAV system --- for cadastral aerial survey photography operations
p0074 A78-16536
CADMIUM NICKEL BATTERIES
U NICKEL CADMIUM BATTERIES
CALCULATION
U COMPUTATION
CALCULATORS
Simplified sonic-boom prediction --- using aerodynamic configuration charts and calculators or slide rules
[NASA-TP-1122] p0301 N78-20078
Airplane stability calculations with a card programmable pocket calculator
[NASA-TM-78678] p0552 N78-30138
CALCULUS
NT ASYMPTOTIC SERIES
NT VORTICITY
CALIBRATING
NT WIND TUNNEL CALIBRATION
Strain gage calibration of a complex wing
p0071 A78-16182
Calibration of gas turbine instrumentation
p0105 A78-17361
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
Type measurements of aircraft interior sound pressure levels in cruise
[SAE ARP 1323] p0471 A78-44689
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched missiles
p0534 A78-49929
Calibration and test capabilities of the Langley 7- by 10- foot high speed tunnel
[NASA-TM-X-74027] p0043 N78-11121
Deadload calibration program of CVN 68 catapult configuration
[AD-A042225] p0043 N78-11123

The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057

CALIFORNIA
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
Uplink coverage measurements in the Los Angeles area for passive BCAS --- collision avoidance
[AD-A048288] p0239 N78-18027

CALORIMETRY
U HEAT MEASUREMENT

CAMBER
NT CONICAL CAMBER
NT WING CAMBER
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
A mean camberline singularity method for two-dimensional steady and oscillatory aerofoils and control surfaces in inviscid incompressible flow
[ARC-CP-1391] p0545 N78-30066
Analysis of advanced variable camber concepts
p0549 N78-30108
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils
[AD-A055140] p0558 N78-31047

CAMBERED WINGS
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Analysis of advanced variable camber concepts for combat aircraft
p0592 A78-52592
Investigation of a variable camber wing design
[AD-A045951] p0137 N78-14000
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 1.5 to 2.0 --- conducted in the Ames 9 by 7 foot supersonic wind tunnel
[NASA-TM-73271] p0199 N78-16062
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
Calculations of the effects of blowing from the leading edges of a cambered delta wing
[ARC-R/M-3800] p0545 N78-30064

CAMERAS
NT TELEVISION CAMERAS
A camera system for small format aerial photography
p0337 A78-34873

CAMOUFLAGE
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284

CANADA
Navigating Canada, to the end of the twentieth century
p0111 A78-17907
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
Canadian Navy experience with small ship helicopter operations
p0261 N78-19129

CANADAIR AIRCRAFT
From Challenger to winner --- Canadair executive jet design and development
p0510 A78-47570

CANADAIR CP-104 AIRCRAFT
U CANADAIR AIRCRAFT

CANARD CONFIGURATIONS
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration --- in the Langley V/STOL tunnel
[NASA-TP-1090] p0092 N78-13014
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control --- in the Langley Unitary Plan Wind Tunnel
[NASA-TP-1124] p0301 N78-20079
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
High angle canard missile test in the Ames 11-foot transonic wind tunnel
[NASA-CR-2993] p0405 N78-25057
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
Longitudinal aerodynamic characteristics of a fighter model with a close-coupled canard at Mach numbers from 0.40 to 1.20
[NASA-TP-1206] p0456 N78-27136
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration --- test in the Langley high speed 7- by 10-foot tunnel
[NASA-TM-78686] p0487 N78-28052
Wind-tunnel investigation at supersonic speeds of a canard-controlled missile with fixed and free-rolling tail fins
[NASA-TP-1316] p0606 N78-32067
Supersonic transport --- using canard surfaces
[NASA-CASE-LAR-11932-1] p0609 N78-32086
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
Subsonic dynamic stability characteristics of two close-coupled canard-wing configurations
[NASA-TP-1291] p0622 N78-33050
Nonlinear rolling motion analysis of a Canard-controlled missile configuration at angles of attack from 0 to 30 degrees in incompressible flow
[AD-A056695] p0631 N78-33132

CANBERRA AIRCRAFT
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635

CANBERRA BOMBER
U B-57 AIRCRAFT

CANCELLATION CIRCUITS
An adaptive interference cancellation system for elimination of co-located interference signals --- for ATC sites
p0227 A78-27041

CANNONS
U GUNS (ORDNANCE)

CANONICAL FORMS
Two extensions of a theorem of Levi-Civita to

gyroscopic systems and some applications
p0570 A78-50311
CANOPIES
F-15/16 canopy off testing
p0233 A78-28453
Computing internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter low glare canopy design
[AD-A043367] p0032 N78-10873
CANTILEVER BEAMS
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
CANTILEVER MEMBERS
NT CANTILEVER BEAMS
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
CANTILEVER WINGS
U WINGS
CAPACITANCE
In-place recalibration technique applied to a capacitance-type system for measuring rotor blade tip clearance
[NASA-TP-1110] p0352 N78-22101
CAPACITORS
Capacitors for aircraft high power
[AD-A046340] p0151 N78-15052
CAPACITY
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
Air traffic congestion and capacity. A bibliography with abstracts
[NTIS/PS-78/0598/9] p0609 N78-32085
CAPTIVE TESTS
NT STATIC FIRING
NT STATIC TESTS
CAPTURE EFFECT
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073
CARBAMATES (TRADENAME)
NT URETHANES
CARBIDES
NT SILICON CARBIDES
CARBON
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] p0457 N78-27184
CARBON COMPOUNDS
NT FLUOROPOLYMERS
NT SILICON CARBIDES
CARBON DIOXIDE
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-X-74945] p0089 N78-12105
CARBON DIOXIDE LASERS
The pilot's laser --- gas laser rangefinders for aircraft weapons delivery
p0059 A78-15375
CARBON FIBER REINFORCED PLASTICS
Fatigue research on bonded carbon fibre composite/metal joints --- examination of aircraft structural materials
p0002 A78-11400
Quiet revolution - An update on carbon fibres for aircraft structures
p0070 A78-15952
Experience in using high-modulus carbon fibre --- in Viggen wing panels
p0077 A78-16896
Applications of carbon fibre composites in commercial aircraft
p0105 A78-17253
The use of composites in class 1 structures in helicopters --- for rotor blades
p0105 A78-17254
Sailplanes of carbon-fiber construction
p0382 A78-38804
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
Material selection for the Tornado taileron
p0383 A78-38811
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043
Non-destructive inspection of composite materials for aircraft structural applications
p0444 N78-26474
Inspection of carbon fibre parts after fabrication and during service
p0444 N78-26476
Detectability of flaws in boron and carbon composite parts
p0444 N78-26477
CARBON FIBERS
Carbon fiber study
[NASA-TM-79449] p0401 N78-24292
CARBON MONOXIDE
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
Concorde emissions at Dulles International Airport - Results of measurements
p0597 A78-53050
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098
CARBON-CARBON COMPOSITES
The present status and evolution of the inspection of carbon composite aircraft structures in France
p0444 N78-26478
CARBURETORS
Development of a catalytic combustor fuel/air carburetion system
[AD-A044063] p0088 N78-12093
CARET WINGS
An experimental study of boundary layer transition on a caret wing at hypersonic speeds
p0417 A78-41029
A study of the lift-to-drag ratio capability of caret wing waveriders
[AD-A053691] p0498 N78-29069
CARGO
NT AIR CARGO
NT AIR MAIL
CARGO AIRCRAFT
NT C-5 AIRCRAFT
NT C-9 AIRCRAFT
NT C-130 AIRCRAFT
NT C-135 AIRCRAFT
NT C-140 AIRCRAFT
NT C-141 AIRCRAFT
NT F-27 AIRCRAFT
NT SPANLOADER AIRCRAFT
NT YC-14 AIRCRAFT
Minimum requirements for future wide-body aircraft cargo systems and compartments /intermodal/
[SAE ARP 1395] p0471 A78-44691
Design concepts for future air freighters
p0592 A78-52450
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
Aircraft cargo compartment fire test simulation program
[NASA-CR-151951] p0324 N78-21223
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Doctrine versus capabilities: A project manager's dilemma with the CH-47 helicopter

[AD-A052376] p0413 N78-25970
Cargo aircraft and spacecraft forward restraint criteria
[AD-A055343] p0561 N78-31095
The technology assessment of LTA aircraft systems --- hybrid airships for passenger and cargo transportation
[NASA-TM-75535] p0603 N78-32043
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061

CARGO SPACECRAFT
Cargo aircraft and spacecraft forward restraint criteria
[AD-A055343] p0561 N78-31095

CARTOGRAPHY
U MAPPING

CARTRIDGE ACTUATED DEVICES
U ACTUATORS

CASCADE CONTROL
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113

CASCADE FLOW
Comparison of a finite difference method with a time-marching method for blade to blade transonic flow calculations
p0011 A78-12295
Transonic relaxation methods
p0011 A78-12299
Supercritical cascade design
p0012 A78-12302
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades
p0012 A78-12311
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
The aerodynamic design of cascade airfoils - A new exact method based on conformal mapping
p0121 A78-19072
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435
Application of the integral-transformation method to three-dimensional unsteady problems of the theory of cascades
p0370 A78-36366
Calculation of transonic flow through a turbine cascade by the time-step method
p0379 A78-38248
Finite-element analysis of three-dimensional potential flow in turbomachines
p0416 A78-40831
Application of supercritical airfoil technology to compressor cascades - Comparison of theoretical and experimental results
[AIAA PAPER 78-1138] p0421 A78-41842
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
Linearized theory of plane, unsteady, supersonic flow through a cascade - Subsonic part of the leading edge
[ONERA, TP NO. 1978-103] p0508 A78-47347
Calculation of cascade flow by means of spline fit singularity
p0576 A78-50606
Numerical analysis of flow through turbine cascade by the Modified PLIC Method
p0576 A78-50607
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
Understanding turbine secondary flow
p0041 N78-11097
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
A new technique for controlling the exit flow periodicity of supersonic cascades --- throttling with slotted tailboard
p0045 N78-11330
A cascade in unsteady flow
[AD-A045319] p0091 N78-12381
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data
p0322 N78-21148
Determination of the vortex shedding frequency of cascade with different trailing edge thickness
p0347 N78-22067
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111
Experimental study on blade bending vibration
[CUED/A-TURBO/TR-88] p0361 N78-23090
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation

[AD-A053931] p0458 N78-27369
Linearized supersonic unsteady flow in cascades
[ARC-R/M-3911] p0545 N78-30065
Unsteady blade rows in high-speed flow
[AD-A055620] p0615 N78-32391
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392
CASCADE WIND TUNNELS
A new technique for controlling the exit flow periodicity of supersonic cascades --- throttling with slotted tailboard
p0045 N78-11330
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20090
CASCADES
Broadband noise in axial-fan blade cascade
p0579 A78-50650
CASCADES (FLUID DYNAMICS)
U FLUID DYNAMICS
CASE HISTORIES
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
CAST ALLOYS
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
CASTING
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
CASTINGS
Structural castings for aircraft - A progress report from Boeing
p0232 A78-28370
Cast Aluminum Structures Technology (CAST)
[AD-A043469] p0045 N78-11236
CATALYSIS
Development of a catalytic combustor fuel/air carburetion system
p0329 A78-33113
The catalytic combustor - An approach to cleaner combustion --- by reaction control in gas turbine engines
p0416 A78-40820
Development of a catalytic combustor fuel/air carburetion system
[AD-A044063] p0088 N78-12093
CATALYTIC ACTIVITY
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Aircraft afterburner catalytic flame stabilization
p0572 A78-50570
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
CATAPULTS
Deadload calibration program of CVN 68 catapult configuration
[AD-A042225] p0043 N78-11123
The STO deck launch problem
p0259 N78-19107
Evaluation of the CVN 68/CVN 69 launching system
[AD-A049044] p0265 N78-19167
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112
CATHODE RAY TUBES
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
CRT update --- for airborne displays
p0374 A78-37490
Perspective radar display system: TV-like presentation on CRT provides higher lateral position and lateral motion sensitivity than a PPI
[AD-A052342] p0402 N78-24418
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
CAVITATION
U CAVITATION FLOW
CAVITATION CORROSION
Operation of oil seales of aircraft piston engines under conditions of cavitation. I
p0507 A78-47175
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
CAVITATION FLOW
The effect of fluid oscillations in a fuel line on the pressure head of a pump operating in a regime without reverse streams
p0187 A78-24259
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
CAVITIES
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
CELESTIAL GEODESY
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
CENS SYSTEM
U CENTRAL ELECTRONIC MANAGEMENT SYSTEM
CENTER OF GRAVITY
Requirements for aircraft on board weight and balance system
[SAE ARP 1409] p0472 A78-44692
Minimum trimmed drag and optimum c.g. position --- center of gravity
p0473 A78-44831
CENTIMETER WAVES
Aircraft measurements of the spatial fluctuation characteristics of atmospheric radio emission at wavelengths of 0.8 and 1.35 cm
p0229 A78-27721
CENTRAL ELECTRONIC MANAGEMENT SYSTEM
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
CENTRAL PROCESSING UNITS
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904
Computer simulations of ATCRBS processing equipment for use with the aims and transient effects performance prediction models
[AD-A046758] p0139 N78-14025
CENTRIFUGAL COMPRESSORS
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
Improvements in the calculation of the centrifugal compressor flow by experimental study of the complex rotor flow
[DGLR PAPER 77-062] p0117 A78-18707
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
A comparison of the performances of centrifugal compressors with the same impeller and different radial inducers
[ONERA, TP NO. 1978-42] p0479 A78-45282
A research on centrifugal compressor for small gas turbine - The effect of recirculating flow --- automobile engines
p0576 A78-50612
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
Investigation of flow in centrifugal impeller with tandum inducer
p0577 A78-50614
Surge responsibility and range characteristics of centrifugal compressors
p0577 A78-50616
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
Study on stage of centrifugal compressor with air turbine

[AD-A045436] p0101 N78-13452
Investigation of the jet-wake flow of a highly loaded centrifugal compressor impeller
[NASA-TM-75232] p0198 N78-16051
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller
[DLR-FB-77-32] p0245 N78-18073
CENTRIFUGAL FORCE
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
CENTRIFUGAL PUMPS
The effect of fluid oscillations in a fuel line on the pressure head of a pump operating in a regime without reverse streams
p0187 A78-24259
10 years of contract research for the pump/compressor industrial concern
p0523 A78-49175
CENTRIPETAL FORCE
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
CERAMAL PROTECTIVE COATINGS
U PROTECTIVE COATINGS
CERAMIC COATINGS
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145
CERAMICS
The state of development of ceramic components for gas turbines
[DGLR PAPER 77-072] p0116 A78-18703
Aluminous keatite - A durable ceramic material for rotary regenerator cores --- for automotive gas turbine engines
p0574 A78-50588
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
Development of ceramic components for an automotive gas turbine
p0578 A78-50632
New materials in the Si-C-Al-O-N and related systems --- for gas turbine and high temperature applications
p0601 A78-53864
Ceramic composite protection for turbine disc bursts --- for the A-300 aircraft
p0026 N78-10083
Ceramics in gas turbine: Powder and process characterization
[NASA-TM-73875] p0208 N78-17059
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
Ceramic technology readiness program
[FE-2664-3] p0457 N78-27279
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
High-temperature ceramics for automobile gas turbines
[NASA-TM-75457] p0614 N78-32264
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
Ceramics technology readiness development program. Phase 1: Conceptual designs and material screening --- erosion/corrosion resistance
[FE-2786-12] p0632 N78-33243
CERTIFICATION
FAA role of certification - Advanced aircraft systems
[AIAA 77-1472] p0005 A78-12230
Problems of noise certifying business aircraft
p0015 A78-12824
Flyover noise - Measurement and analysis
p0124 A78-19441
FAA's certification position on advanced avionics
p0335 A78-34642
Status report on aircraft noise certification
p0340 A78-35652
The certification of light aircraft
p0369 A78-36280
The airline's role in the certification of aircraft - Criteria for air transport selection
p0417 A78-40995
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
CESSNA AIRCRAFT
NT A-37 AIRCRAFT
NT T-37 AIRCRAFT
Airborne sampling system for plume monitoring
p0418 A78-41280
Aircraft accident report: Knob Hill, Inc., Cessna-421, N999MB, Nogales, Arizona, 22 January 1977
[NTISUB/C/104-011] p0256 N78-19086
CESSNA MILITARY AIRCRAFT
U MILITARY AIRCRAFT
CF-104 AIRCRAFT
U CANADAIR AIRCRAFT
CFRP
U CARBON FIBER REINFORCED PLASTICS
CH-53 HELICOPTER
U H-53 HELICOPTER
CH-47 HELICOPTER
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Doctrine versus capabilities: A project manager's dilemma with the CH-47 helicopter
[AD-A052376] p0413 N78-25970
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
CH-62 HELICOPTER
UTTAS/HLH rotor blade fabrication and testing --- YUH-61A and XCH-62A helicopters
p0050 A78-13456
CHAIRS
U SEATS
CHALCOGENIDES
NT CARBON DIOXIDE
NT CARBON MONOXIDE
NT NITRIC OXIDE
NT NITROGEN OXIDES
NT PEROXIDES
NT PLUTONIUM OXIDES
NT WURTZITE
NT ZIRCONIUM OXIDES
CHANCE-VOUGHT MILITARY AIRCRAFT
U MILITARY AIRCRAFT
CHANNEL CAPACITY
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
CHANNEL FLOW
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
Three-dimensional transonic shear flow in a channel
p0010 A78-12290
Aerodynamic characteristics of a rectangular wing with a tip clearance in a channel
p0106 A78-17427
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
Analysis and calculation of plane skew symmetric contours of second-order smoothness --- for channel surface design
p0174 A78-22636
Study of the propagation of higher modes in cylindrical ducts with impedance walls --- for aircraft noise reduction
p0221 A78-25773
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139

The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures
p0580 A78-50780
Calculation of viscous flow in straight weakly divergent diffusors
p0583 A78-51158
Model calculations of the generation of self-excited oscillations in a supersonic duct with stepwise widening of cross section
p0584 A78-51165
Influence of rarefaction and compression waves on base pressure
p0600 A78-53781
CHANNELS (DATA TRANSMISSION)
An airplane fiber optic multiplex data bus design and feasibility demonstration system
[AIAA 77-1475] p0005 A78-12232
Aircraft B-wav system connected on optical bus
p0054 A78-14941
Compatibility testing and integration of DAIS multiplex bus equipments --- Digital Avionics Information System
p0064 A78-15638
Fiber optic data buses for avionics - A systems view
p0066 A78-15656
Stores management and data bus systems --- for F-16 aircraft
p0066 A78-15660
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
The MAROTS maritime satellite programme
p0227 A78-27049
Data transmission aboard aircraft
p0417 A78-40869
MIL-STD-1553B proposed --- data bus development in avionic architecture
p0531 A78-49866
CHAOTIC CLOUD PATTERNS
U CLOUDS (METEOROLOGY)
CHAPMAN SHEAR LAYER
U SHEAR LAYERS
CHAPMAN-JOUGET FLAME
U FLAME PROPAGATION
CHARACTERISTIC EQUATIONS
U EIGENVALUES
U EIGENVECTORS
CHARACTERISTIC FUNCTIONS
U EIGENVALUES
U EIGENVECTORS
CHARACTERISTIC METHOD
U METHOD OF CHARACTERISTICS
CHARACTERS
U SYMBOLS
CHARGE DISTRIBUTION
Surface current and charge density induced on aircraft
p0169 A78-21990
The lightning environment
p0035 N78-11025
CHARTS
Jeppesen charting for area navigation
p0370 A78-36454
Simplified sonic-boom prediction --- using aerodynamic configuration charts and calculators or slide rules
[NASA-TT-1122] p0301 N78-20078
CHECKOUT
Arrival inspections/pre-operational inspections (aviation materiel)
[AD-A047260] p0202 N78-16376
CHECKOUT EQUIPMENT
U TEST EQUIPMENT
CHEMICAL ANALYSIS
NT GAS ANALYSIS
NT OZONOMETRY
NT QUALITATIVE ANALYSIS
NT QUANTITATIVE ANALYSIS
NT SPECTROSCOPIC ANALYSIS
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
[NASA-TM-73829] p0101 N78-13233
Material evaluation of polyurethane foam, 0.05 g/cm 3 density
[BDX-613-1836-REV] p0567 N78-31249
CHEMICAL ELEMENTS
NT ALUMINUM
NT BERYLLIUM
NT BORON
NT CARBON
NT CHROMIUM
NT HYDROGEN
NT LIQUID HYDROGEN
NT NITROGEN
NT PHOSPHORUS
NT RADIOACTIVE ISOTOPES
NT RARE EARTH ELEMENTS
NT TANTALUM
NT TITANIUM
NT ZIRCONIUM 95
CHEMICAL EXTINGUISHERS
U FIRE EXTINGUISHERS
CHEMICAL FUELS
NT AIRCRAFT FUELS
NT DIESEL FUELS
NT HYDROCARBON FUELS
NT HYDROGEN FUELS
NT JET ENGINE FUELS
NT JP-4 JET FUEL
NT JP-5 JET FUEL
NT SLURRY PROPELLANTS
NT SYNTHETIC FUELS
Innovative aircraft design study. Task 2: Design subtask 1. Chemically fueled aircraft. Volume 2: Appendices
[AD-A044319] p0023 N78-10054
CHEMICAL INDICATORS
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
CHEMICAL KINETICS
U REACTION KINETICS
CHEMICAL MACHINING
NT ELECTROCHEMICAL MACHINING
CHEMICAL PROPERTIES
NT THERMOCHEMICAL PROPERTIES
CHEMICAL REACTIONS
NT HALOGENATION
NT HYDROGENATION
NT OXIDATION
NT PHOTOCHEMICAL REACTIONS
CHEMICAL TESTS
NT CHEMICAL ANALYSIS
NT GAS ANALYSIS
NT OZONOMETRY
NT QUALITATIVE ANALYSIS
NT QUANTITATIVE ANALYSIS
NT SALT SPRAY TESTS
NT SPECTROSCOPIC ANALYSIS
CHEMONUCLEAR PROPULSION
U NUCLEAR PROPULSION
CHILDREN
Research into effects of aircraft noise on hearing of children in exposed residential areas around an airport
p0117 A78-18779
CHILLING
U COOLING
CHINA
Preparing today, to meet the ATC challenges of tomorrow --- for civil aircraft operations in Taiwan
p0596 A78-52973
CHINOOK HELICOPTER
U CH-47 HELICOPTER
CHIPS (ELECTRONICS)
A new chip detector --- component failure detection in aircraft and helicopter propulsion and transmission systems
p0058 A78-15158
CHIRP
NT CHIRP SIGNALS
CHIRP SIGNALS
Some results on digital chirp --- radar design
p0222 A78-26160
A high duty factor chirp radar
p0538 A78-49976
CHROMATOGRAPHY
NT LIQUID CHROMATOGRAPHY

CHROME
U CHROMIUM
CHROMIUM
Extending the service life of aircraft components made of high-strength steels --- Russian book
p0522 A78-48518
CHROMIUM ALLOYS
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
CHRONOTRONS
U TIME LAG
CHUGGING
U COMBUSTION STABILITY
CINEFLUOROGRAPHY
U RADIOGRAPHY
CINERADIOGRAPHY
U RADIOGRAPHY
CIRCUIT PROTECTION
Aircraft lightning vulnerability testing
p0062 A78-15585
CIRCUITS
NT ANALOG CIRCUITS
NT CANCELLATION CIRCUITS
NT DIGITAL INTEGRATORS
NT EQUIVALENT CIRCUITS
NT FLUIDIC CIRCUITS
NT INTEGRATED CIRCUITS
NT LIMITER CIRCUITS
NT LOGIC CIRCUITS
NT MATRICES (CIRCUITS)
NT POWER SUPPLY CIRCUITS
NT SWITCHING CIRCUITS
NT TRANSISTOR CIRCUITS
CIRCULAR CYLINDERS
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200
CIRCULATION
NT ATMOSPHERIC CIRCULATION
An assessment of circulation control airfoil development
[AD-A043826] p0033 N78-11012
CITIES
NT SAN FRANCISCO (CA)
CIVIL AVIATION
World commercial air transport market to 1991
p0003 A78-11799
An overview of enroute radio navigation services for civil aviation
[AIAA 77-1509] p0007 A78-12255
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
The geriatric jet problem
p0014 A78-12600
Technical exploitation of aircraft /2nd revised and enlarged edition/ --- Russian book
p0014 A78-12606
Mathematical planning and bulk service methods of civil aviation --- Russian book
p0015 A78-13000
Feasibility of modern airships - Preliminary assessment
p0050 A78-13416
20 years IL-18 --- aircraft design features, capabilities and applications
p0050 A78-13497
Further improvement of the efficiency of computational procedures in flight operations
p0051 A78-13499
Protective equipment for cargo transport in passenger cabins
p0051 A78-13501
Aircraft maintenance scheduling
p0052 A78-13849
The quiet battle over aircraft noise
p0058 A78-15167
Airport aircraft economic interface
[SAE PAPER 770580] p0060 A78-15387
Remotely piloted aircraft in the civil environment
p0070 A78-16100
The assessment of noise, with particular reference to aircraft
p0074 A78-16595
Why fly supersonically --- flight time reduction vs fuel consumption and low payload
p0109 A78-17889
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
Advances in aircraft efficiency
p0112 A78-18022
Commercial aviation future progress, programs, proposals and problems - A prognosis /W. Rupert Turnbull Lecture/
p0112 A78-18034
The status of flight recorders in modern aircraft
p0122 A78-19294
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Technology readiness for an SST
[AIAA PAPER 78-356] p0186 A78-24031
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
Planning for the next generation aircraft - An airline view
[AIAA PAPER 78-361] p0186 A78-24033
Prospects for a new generation air transport
[AIAA PAPER 78-363] p0186 A78-24035
The future determines the past - Bermuda I in the light of Bermuda II --- air transportation agreement
p0223 A78-26470
Bermuda II and after
p0223 A78-26471
The impact of Bermuda II on future bilateral agreements
p0224 A78-26472
The year for shaping a digital operations R&D program --- for ATC
p0231 A78-28218
Product support for French equipment used by civil aviation companies
p0278 A78-29657
Whither MLS --- Microwave Landing System civil and military applications
p0281 A78-30096
Profile of the airport-development crisis
p0282 A78-30244
Remotely piloted aircraft in the civil environment
p0283 A78-30506
The division of air transport markets between carriers - Local service operations
p0284 A78-30697
Ride technology applications to large passenger aircraft
p0331 A78-33443
The strategy of traffic regulation in Western Europe
p0334 A78-34374
Expansion potential for the local service air carrier
p0376 A78-37539
Application of modern methods in civil aircraft construction
p0382 A78-38808
The effect of fuel consumption on cost developments
p0469 A78-44197
Wing design for a future airliner
p0471 A78-44619
Minimum requirements for future wide-body aircraft cargo systems and compartments /intermodal/
[SAE ARP 1395] p0471 A78-44691
Requirements for aircraft on board weight and balance system
[SAE ARP 1409] p0472 A78-44692
Aircraft guidance and flight safety - Current and future problems for research and industry
p0569 A78-50263
Toulouse combines elegance with economy --- French airport design
p0570 A78-50436
Sounding the runway
p0582 A78-50822
Airline contributions to better air traffic control
p0587 A78-51518
Future large civil turbofans and powerplants /Seventeenth Short Bros. Commemorative Lecture/
p0587 A78-51519
European air transport up to the year 2000 /Lord Douglas of Kirtleside Lecture/
p0587 A78-51520

The shape of airliners to come
p0589 A78-51817
Boeing launches the 767
p0591 A78-52244
The L-1011-500 long-range TriStar
p0591 A78-52245
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
The changing environment of international air commerce
p0592 A78-52448
Aviation futures to the year 2000
p0595 A78-52966
Overview of potential ATC developments
p0596 A78-52970
Preparing today, to meet the ATC challenges of tomorrow --- for civil aircraft operations in Taiwan
p0596 A78-52973
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Possibilities and goals for the future SST
[AIAA-PAPER-75-254] p0017 N78-10006
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
Terminal area forecast 1978-1988
[AD-A046543] p0195 N78-16027
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
Combined military and commercial application of light helicopters
p0262 N78-19136
Accuracy considerations on new Microwave Landing Systems (MLS) from an operational point of view
p0315 N78-21081
Area navigation systems and procedures
p0316 N78-21091
Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
Civil components program "Wing Section'. Preliminary design of engine mounting --- and nacelle mounting
[BMFT-FB-W-77-28] p0350 N78-22086
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
Civil components program "Wing Section'. Wing structure parameter study --- effects on wing weight
[BMFT-FB-W-77-30] p0350 N78-22088
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
Civil components program "Wing Section'. Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
Civil components program "Wing Section'. Materials selection
[BMFT-FB-W-77-37] p0351 N78-22091
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
Avionics performance analysis: A historical review and a current assessment of flight instrumentation and control systems in civil aviation
[NASA-CR-145378] p0610 N78-32094
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
Annual review of aircraft accident data, US air carrier operations, 1976
[PB-281329/3] p0624 N78-33065
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075

CLARK Y AIRFOIL
U AIRFOIL PROFILES

CLASSIC AIRCRAFT
U IL-62 AIRCRAFT

CLASSICAL MECHANICS
NT ASTRODYNAMICS
NT ORBITAL MECHANICS

CLEAN FUELS
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417

CLEANERS
NT AIR FILTERS

CLEANING
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523

CLEAR AIR TURBULENCE
Clear air turbulence accidents
p0273 A78-28833
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971

CLEARANCES
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
Gas path sealing in turbine engines
[NASA-TM-73890] p0318 N78-21109
In-place recalibration technique applied to a capacitance-type system for measuring rotor blade tip clearance
[NASA-TP-1110] p0352 N78-22101
Turbine tip-clearance measurement
[AD-A052042] p0362 N78-23097
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106

CLIMBING FLIGHT
Some aspects of the problem of flights in ascent
p0119 A78-19041
Prediction of the ascending speeds of gliders in thermal convection over a plain
p0177 A78-23398
More about flight-path-angle transitions in optimal airplane climbs
p0291 A78-32098
Compressible flow about helicopter rotors
p0372 A78-36947
Lost range, fuel and time due to climb and descent: Propeller-driven aeroplanes
[ESDU-77015] p0084 N78-12066
A new formulation for the epsilon method applied to the minimum-time-to-climb problem
p0357 N78-23028
The on-board calculation of optimal climbing paths
p0434 N78-26078

CLOCKS
NT ATOMIC CLOCKS

CLOSED CYCLES
Thermodynamical performances of closed-cycle gas-turbine
p0575 A78-50605

CLOSED LOOP SYSTEMS
U FEEDBACK CONTROL
CLOTHING
NT HELMETS
CLOUD SEEDING
Aircraft use in weather modification
p0056 A78-14995
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
Initial development of a tactical system for dispersing supercooled stratus
[AD-A056570] p0635 N78-33677
CLOUDS
NT CLOUDS (METEOROLOGY)
CLOUDS (METEOROLOGY)
The lightning environment
p0035 N78-11025
CLUTCHES
A clutch for V/STOL
[SAE PAPER 770989] p0180 A78-23826
Description of transient motion of aviation mechanisms with double-winding electromagnetic clutches
p0220 A78-25584
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
Advanced overrunning clutch technology --- for use in helicopters
[AD-A052635] p0403 N78-24557
CLUTTER
An advanced computer calculation of ground clutter in an airborne pulse Doppler radar
p0066 A78-15662
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
A high duty factor chirp radar
p0538 A78-49976
CMOS
Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
COAL LIQUEFACTION
Jet fuels from synthetic crudes
p0461 A78-43415
Gas turbine engine fuel from synthetic crude
p0461 A78-43416
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417
Progress on coal-derived fuels for aviation systems
[NASA-TM-78696] p0412 N78-25545
COAL UTILIZATION
CTOL concepts and technology development
p0461 A78-43358
Progress on coal-derived fuels for aviation systems
p0497 N78-29063
COANDA EFFECT
An investigation of corner separation within a thrust augmenter having Coanda jets
[AD-A052131] p0366 N78-23392
COASTS
Air-sea rescue operations. Search and rescue experience
p0262 N78-19134
COATING
NT ELECTROPLATING
COATINGS
NT ANODIC COATINGS
NT CERAMIC COATINGS
NT ELECTROPLATING
NT METAL COATINGS
NT PAINTS
NT PLASTIC COATINGS
NT PROTECTIVE COATINGS
NT SPRAYED COATINGS
NT THERMAL CONTROL COATINGS
COBALT ALLOYS
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
Reaction diffusion in the NiCrAl and CoCrAl systems
p0597 A78-53063
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
COCKPIT SIMULATORS
The role of cockpit simulators in the integration of pilot/controller ATC system related avionics and procedures
[AIAA 77-1516] p0010 A78-12284
Peripheral processors for high-speed simulation --- helicopter cockpit simulator
p0052 A78-14063
Advanced flight decks for the 80s --- cockpit design for transport aircraft
p0273 A78-28835
New aspects in the movement simulation of the research flight simulator of DFVLR
[DGLR PAPER 77-086] p0290 A78-31950
High acceleration cockpit simulator evaluation
[AD-A045165] p0100 N78-13081
Wide-angle, multiviewer infinity display design
[AD-A051158] p0364 N78-23108
COCKPITS
Changes in ground noise levels of general aviation aircraft derived from changes in cockpit noise levels
p0002 A78-11488
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
Pool fire induced cockpit degradation
p0050 A78-13415
Reversing the trend of cockpit complexity with smart displays --- for helicopters
p0059 A78-15381
Cockpit 2000 --- aircraft control and display device innovations
p0078 A78-17136
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft
[AIAA PAPER 78-242] p0162 A78-20765
Aircraft and helicopter cockpit noise
p0278 A78-29673
The design of future cockpits for high performance fighter aircraft
p0370 A78-36446
COMED - The cockpit display of the future --- COmbined Map and Electronic Display
p0508 A78-47268
Computing internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter low glare canopy design
[AD-A043367] p0032 N78-10873
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045
A comparison of integrated and conventional cockpit warning systems --- pilot performance and reaction time in man machine systems
[AD-A048670] p0239 N78-18022
Cockpit displayed traffic information study, part 2
[NASA-CR-156115] p0304 N78-20102
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
Display systems and cockpit design
p0550 N78-30116
The design of a high g cockpit
p0550 N78-30118
CODING
NT REDUNDANCY ENCODING
NT SIGNAL ENCODING
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis --- NASTRAN
[AD-A048840] p0254 N78-19065
COEFFICIENTS
NT AERODYNAMIC COEFFICIENTS
NT DIFFUSION COEFFICIENT
NT DISCHARGE COEFFICIENT

NT HEAT TRANSFER COEFFICIENTS
NT INFLUENCE COEFFICIENT
NT NOZZLE THRUST COEFFICIENTS
NT REGRESSION COEFFICIENTS
NT STRUCTURAL INFLUENCE COEFFICIENTS
COHERENT RADAR
EAR navigation update modes --- Electronically Agile Radar
p0066 A78-15667
COIN AIRCRAFT
NT F-5 AIRCRAFT
COKE AIRCRAFT
U AN-24 AIRCRAFT
COLD FLOW TESTS
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142
COLD WALLS
U WALLS
COLLIMATORS
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064
COLLISION AVOIDANCE
NT BEACON COLLISION AVOIDANCE SYSTEM
A computer controlled aircraft collision avoidance system
[AIAA 77-1524] p0008 A78-12264
Aircraft separation in the controlled airspace of the United States --- ATC systems
p0059 A78-15250
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
A single site passive collision avoidance system
p0111 A78-17912
The collision risk
p0175 A78-22851
Some test results concerning visibility of obstacle and hazard beacons
p0280 A78-29907
By accident or design --- ATC collision avoidance systems
p0334 A78-34375
Concerning the logical comparison of ATC separation standard assessment models
p0370 A78-36455
Fully-automated, pilot-monitored air traffic control
p0373 A78-37155
Electronic aircraft collision avoidance system --- Russian book
p0376 A78-37603
A relative motion analysis of horizontal collision avoidance
p0387 A78-39674
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
Minimum performance standard for anticollision light systems
[SAE AS 8017] p0471 A78-44684
Preventing helicopter mid-air collisions with the proximity warning device
p0585 A78-51223
Stochastic properties of conflict frequency at multiple connected air route intersections
p0590 A78-51945
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
ASD strobe light evaluation --- luminous intensity requirements for aircraft anticollision lights
[AD-A045533] p0095 N78-13036
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
L-band air-to-air multipath measurements --- for airborne collision avoidance systems
[AD-A045941] p0144 N78-14212
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
Uplink coverage measurements in the Los Angeles area for passive BCAS --- collision avoidance
[AD-A048288] p0239 N78-18027
The impact of a proposed active BCAS on ATCRBS performance in the Washington, D. C., 1981 environment
[AD-A048589/6] p0303 N78-20099
Air traffic safety in the airport near range
[TUBS/SFB58/M4] p0304 N78-20103
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106
Design of a collision avoidance system model with statistical interrogation --- separation and collision avoidance by nonsynchronous techniques (SECANT)
p0304 N78-20107
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
Bearing study program --- bearing measurement subsystem for SECANT Collision Avoidance System
[AD-A049767] p0314 N78-21068
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
Design considerations for a ground avoidance monitor for fighter aircraft
p0432 N78-26058
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
COLLISION WARNING DEVICES
U COLLISION AVOIDANCE
U WARNING SYSTEMS
COLLISIONS
NT BIRD-AIRCRAFT COLLISIONS
NT MIDAIR COLLISIONS
NT PARTICLE COLLISIONS
COLLOCATION
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
COLLOIDS
NT AEROSOLS
NT FOG
COLOR
Warning and marking colours on the apron
p0072 A78-16278
COLOR PHOTOGRAPHY
Color displays for airborne weather radar
p0372 A78-36980
COLOR TELEVISION
Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] p0246 N78-18083
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362

COLORATION
U COLOR
COMBAT
Computerized test set for the Air Combat Maneuvering Instrumentation
p0068 A78-15700
The Dual-Flight-Simulator on the evaluation of air combat effectiveness
[DGLP PAPER 77-080] p0290 A78-31948
Air-to-air combat simulation
p0510 A78-47868
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363 --- visual display training simulator devices
[AIAA 78-1580] p0579 A78-50661
The ground-attack/penetration model: A Monte Carlo simulation model to assess the survivability and to evaluate tactics for low-altitude military missions in an environment of groundbased air defence systems
p0431 N78-26051
Prediction of operational combat performance
p0435 N78-26086
Combat damage tolerance and repair of aircraft structures
[AGARD-R-667] p0491 N78-28088
Approaches to combat damage repair
p0491 N78-28089
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
Aims and progress of a battle damage repair capability in the Royal air force
p0491 N78-28091
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094
COMBINATORIAL ANALYSIS
Methodology for optimizing an air fleet
p0116 A78-18668
Combinatorially derived limits on the surface return for an air/surface monopulse ranging radar
p0539 A78-50001
COMBINED STRESS
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress --- aircraft structural failures
p0332 A78-33700
COMBUSTIBILITY
U FLAMMABILITY
COMBUSTIBLE FLOW
Combustion in flow --- Russian book on combustion theory applied to aircraft combustion chambers
p0485 A78-46583
COMBUSTION
NT AFTERBURNING
NT FUEL COMBUSTION
NT HYDROCARBON COMBUSTION
NT SUPERSONIC COMBUSTION
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
COMBUSTION CHAMBERS
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
Modeling solid-fuel ramjet combustion
p0076 A78-16709
Account of mainstream turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 77-HT-10] p0106 A78-17483
Study of a turbomachine combustor with swirling flow
[ONERA, TP NO. 1977-170] p0108 A78-17662
Mathematical model of the combustion-chamber filling process in a pulsating jet engine
p0131 A78-20253
Simplified theoretical model of combustion in the chamber of a pulsed jet engine
p0132 A78-20279
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
Development of a catalytic combustor fuel/air carburetion system
p0329 A78-33113
Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor
p0330 A78-33114
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Review of flashback reported in prevaporizing/premixing combustors
p0377 A78-37772
Combustion in gas turbine engines - A review of ONERA recent works
[ONERA, TP NO. 1978-25] p0386 A78-39580
The catalytic combustor - An approach to cleaner combustion --- by reaction control in gas turbine engines
p0416 A78-40820
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
An empirical/analytical design methodology for gas turbine combustors
[AIAA PAPER 78-998] p0464 A78-43545
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
Combustion in flow --- Russian book on combustion theory applied to aircraft combustion chambers
p0485 A78-46583
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
Combustor performance of high availability fuels
p0572 A78-50568
Variability of emissions measurements on a small gas turbine engine
p0572 A78-50569
Alternative fuel effects upon combustion efficiency in continuous combustors
p0572 A78-50571
Performance of the Vortex-Controlled Diffuser /VCD/ in an annular combustor flowpath
p0572 A78-50574
Impingement cooling and its application to combustor design
p0573 A78-50584
Development of the can-type gas turbine combustors
p0574 A78-50590
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
Theory on the two-frequency ranges for the unsteady fluctuations of the turbulent combustion process in a jet-engine combustion chamber. II - Analysis of the characteristic equation, comparison with the experiment
p0580 A78-50778
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle

engines
p0599 A78-53511
Fuel combustor
[NASA-CASE-LEW-12137-1] p0031 N78-10224
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
Rectangular capture area to circular combustor scramjet engine
[NASA-TM-78657] p0318 N78-21107
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
Fundamental aspects of the aerodynamics of turbojet engine combustors
[NASA-TM-75287] p0398 N78-24142
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
YF 102 in-duct combustor noise measurement, volume 1
[NASA-CR-135404-VOL-1] p0412 N78-25827
YF 102 in-duct combustor noise measurement, volume 3
[NASA-CR-135404-VOL-3] p0412 N78-25829
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
Combustor design and operation for a sub-scale turbojet test cell
[AD-A033791] p0455 N78-27134
Mixing and combustion in high speed air flows --- combustor design
[AD-A054398] p0503 N78-29188
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259
Flame stabilization in a ramjet combustion chamber by means of a pilot gas generator
[DLR-FB-77-54] p0564 N78-31117
Combustion and emission characteristics of a gas turbine combustor
p0610 N78-32095
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097

COMBUSTION CONTROL
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
The catalytic combustor - An approach to cleaner combustion --- by reaction control in gas turbine engines
p0416 A78-40820
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798

COMBUSTION EFFICIENCY
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
A case for a new model for turbulent flame propagation
p0229 A78-27840
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Development of a catalytic combustor fuel/air carburetion system
p0329 A78-33113
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897
Combustion in gas turbine engines - A review of ONERA recent works
[ONERA, TP NO. 1978-25] p0386 A78-39580
Combustion performance of gas turbine combustors burning alternative fuels
[AIAA PAPER 78-1000] p0465 A78-43547
The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
Let's put fuel efficiency into perspective
p0508 A78-47269
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
Design and verification of a turbofan swirl augmentor
p0572 A78-50564
Combustor performance of high availability fuels
p0572 A78-50568
Alternative fuel effects upon combustion efficiency in continuous combustors
p0572 A78-50571
Development of the can-type gas turbine combustors
p0574 A78-50590
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
Boron combustion in combinatory propulsion
[ESA-TT-462] p0365 N78-23258
Fuel conservative aircraft engine technology
[NASA-TM-78962] p0454 N78-27127
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098

COMBUSTION INSTABILITY
U COMBUSTION STABILITY

COMBUSTION PHYSICS
Trends and research opportunities in airbreathing propulsion
[AIAA PAPER 78-44] p0157 A78-20652
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
Laboratory studies of lean combustion
p0040 N78-11079

COMBUSTION PRODUCTS
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145

The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Soot formation in a turbulent swirling flow
p0040 N78-11075
Laboratory studies of lean combustion
p0040 N78-11079
Characterization of secondary ignition sources in unattended compartments and full-scale baseline test --- aircraft safety
[NASA-CR-151573] p0094 N78-13028
Time-dependent fire behavior of aircraft cabin materials
[AD-A050923] p0324 N78-21234
Characteristics and combustion of future hydrocarbon fuels --- aircraft fuels
[NASA-TM-78865] p0401 N78-24370
Ceramic technology readiness program
[PE-2664-3] p0457 N78-27279
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088
Air pollution emission factors: A bibliography with abstracts
[NTIS/PS-78/0548/4] p0617 N78-32604

COMBUSTION STABILITY
NT FLAME STABILITY
Low frequency augmentor instability study --- afterburning effects in turbofan engines
[AIAA PAPER 78-996] p0464 A78-43543
Aircraft afterburner catalytic flame stabilization
p0572 A78-50570
Low frequency combustion instability in augmentors
p0321 N78-21138

COMBUSTION VIBRATION
Theory of two frequency ranges of unstable oscillations of turbulent combustion in a jet-engine chamber. I - Formulation of the stability problem, the characteristic equation
p0187 A78-24253
Theory on the two-frequency ranges for the unsteady fluctuations of the turbulent combustion process in a jet-engine combustion chamber. II - Analysis of the characteristic equation, comparison with the experiment
p0580 A78-50778
Mechanism of pulsating combustion of the liquid fuel fed to the airflow through the circulation zone behind the flame stabilizer
p0581 A78-50788

COMBUSTION WAVES
U FLAME PROPAGATION

COMBUSTORS
U COMBUSTION CHAMBERS

COMFORT
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Model of aircraft passenger acceptance
p0526 A78-49684

COMMAND AND CONTROL
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
Dual band airborne SATCOM terminal
p0537 A78-49972
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311

COMMAND-CONTROL
U COMMAND AND CONTROL

COMMERCE
The changing environment of international air commerce
p0592 A78-52448

COMMERCIAL AIRCRAFT
NT A-300 AIRCRAFT
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT BOEING 747 AIRCRAFT
NT CV-340 AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
NT EUROPEAN AIRBUS
NT F-28 TRANSPORT AIRCRAFT
NT IL-62 AIRCRAFT
NT L-1011 AIRCRAFT
NT LEAR JET AIRCRAFT
NT SUPERSONIC COMMERCIAL AIR TRANSPORT
The timing of technology for commercial transport aircraft
p0001 A78-10192
World commercial air transport market to 1991
p0003 A78-11799
The next commercial jet transport: The need, economics, technology, and financing; Air Transportation Research International Forum, San Francisco, Calif., May 9, 1977, Papers
p0057 A78-15084
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
An optimistic view of the plane facts --- cost-efficient airliners development
p0057 A78-15086
The next generation of commercial aircraft - International perspective
p0057 A78-15087
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
Commercial air transport - The next ten years
p0058 A78-15091
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
The quiet battle over aircraft noise
p0058 A78-15167
Advancing transport aircraft technology towards 2000
p0078 A78-17135
Cockpit 2000 --- aircraft control and display device innovations
p0078 A78-17136
Applications of carbon fibre composites in commercial aircraft
p0105 A78-17253
Why fly supersonically --- flight time reduction vs fuel consumption and low payload
p0109 A78-17889
Active controls for transports
p0112 A78-18020
Commercial aviation future progress, programs, proposals and problems - A prognosis /W. Rupert Turnbull Lecture/
p0112 A78-18034
The influence of engine position on aircraft noise
p0121 A78-19083
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
In search of a better approach concept - MLS and HUD --- Head-Up Display/Microwave Landing System
p0134 A78-20479
Big fans for the airlines
p0170 A78-22269
Fracture analysis of aerospace metals
p0175 A78-22724
Planning for the next generation aircraft - An airline view
[AIAA PAPER 78-361] p0186 A78-24033
Prospects for a new generation air transport
[AIAA PAPER 78-363] p0186 A78-24035
Future development of commercial aircraft: Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
Problems of supersonic transport
[DGLR PAPER 77-007] p0188 A78-24404

The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
From analog to digital control systems - Improved performance by means of advanced technology --- used for commercial aircraft
[DGLR PAPER 77-036] p0190 A78-24426
Application of composites on civil aircraft
p0218 A78-25199
Future CTOL aircraft characteristics
p0229 A78-27542
Integrated controls for a new aircraft generation
p0231 A78-28219
Giants battle in US small turbine market --- jet engines for small aircraft
p0274 A78-29174
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Energy conserving aircraft from the engine viewpoint
p0287 A78-31310
The energy costs of some noise abatement procedures
p0288 A78-31313
Composite structures for commercial transport aircraft
p0337 A78-34901
Ergonomics in commercial aircraft landing
p0371 A78-36621
A rising sun in aircraft --- Japanese commercial aircraft development programs
p0379 A78-38524
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
Wing design for a future airliner
p0471 A78-44619
Fault isolation in environmental control systems of commercial transports
[SAE AIR 1266] p0472 A78-44696
Structural material trends in commercial aircraft
[AIAA PAPER 78-1552] p0482 A78-46515
PNAV - Corporate operators set the pace
p0509 A78-47424
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
Operating characteristics of bypass turbojet engines --- Russian book
p0540 A78-50125
Assessment of the structural-mechanical design of commercial aircraft gas turbine engines
p0578 A78-50625
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Possibilities and goals for the future SST
[AIAA-PAPER-75-254] p0017 N78-10006
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
Collection of commercial aircraft characteristics for study of runway roughness
[AD-A042623/9] p0030 N78-10118
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
Automated meteorological data from commercial aircraft via satellite: Present experience and future implications
[NASA-TM-73750] p0212 N78-17558
A maintenance model for k-out-of-n subsystems aboard a fleet of advanced commercial aircraft
[NASA-CR-145272] p0345 N78-22020
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
Energy savings. An aircraft constructor's viewpoint
[AAAP-NT-77-24] p0397 N78-24127
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133
CTOL transport technology, 1978 --- conferences
[NASA-CP-2036-PT-1] p0446 N78-27046
Overview of NASA CTOL program
p0446 N78-27047
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105
Analysis of the engine fragment threat and the crash environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873

COMMERCIAL AVIATION
U CIVIL AVIATION
U COMMERCIAL AIRCRAFT

COMMONALITY (EQUIPMENT)
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784

COMMUNICATING
NT AIRCRAFT COMMUNICATION
NT GROUND-AIR-GROUND COMMUNICATIONS
NT INFORMATION DISSEMINATION
NT SELECTIVE DISSEMINATION OF INFORMATION

COMMUNICATION
NT INFORMATION DISSEMINATION
NT LINE OF SIGHT COMMUNICATION
NT OPTICAL COMMUNICATION
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283

COMMUNICATION CABLES
NT OPTICAL WAVEGUIDES
NT WAVEGUIDES
Fiber optic development for tactical fighter applications
p0534 A78-49906

COMMUNICATION EQUIPMENT
NT RADIO RECEIVERS
NT TRANSMITTER RECEIVERS
Test operations procedures physical characteristics aviation material
[AD-A053196] p0408 N78-25086

COMMUNICATION NETWORKS
ARINC communications addressing and reporting system /ACARS/ - The data link that got implemented and why
[AIAA 77-1522] p0008 A78-12263
Maritime satellite communications - Where we are and where we're going
[AAS 77-257] p0371 A78-36721
Two-channel method of processing interval codes --- for navigation systems
p0429 A78-43085
The Central Flow Control /CFC/ system --- for Air Traffic Control System Command Center
p0595 A78-52960

COMMUNICATION SATELLITES
NT AEROSAT SATELLITES
NT MAROTS (ESA)

Data relay packages for commercial ships and aircraft
[AIAA 77-1560] p0051 A78-13685
A modulation/encoding scheme for use in a fading environment
p0069 A78-15718
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
SHF/EHF satellite communication terminal --- onboard C-135 aircraft
[AIAA 78-581] p0328 A78-32921
Maritime satellite communications - Where we are and where we're going
[AAS 77-257] p0371 A78-36721
EMC analysis of the proposed AEROSAT VHF subsystem with current inband communications systems. Volume 2: Worldwide
[AD-A043904] p0090 N78-12281

COMMUNICATION SYSTEMS
U TELECOMMUNICATION

COMMUNICATION THEORY
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040

COMMUNITIES
More public consultation on airport plans
p0275 A78-29208
Airport/community environmental planning
p0284 A78-30678

COMPACTING
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120

COMPARTMENTS
NT AIRCRAFT COMPARTMENTS
NT ANECHOIC CHAMBERS
NT PRESSURIZED CABINS
NT TEST CHAMBERS

COMPASSES
NT GYROCOMPASSES

COMPETITION
The use of the AIAA-Bendix Design Competition in aerospace design courses
[AIAA PAPER 78-1488] p0514 A78-47931

COMPILATION (COMPUTERS)
U COMPILERS

COMPILER PROGRAMS
U COMPILERS

COMPILERS
The versatility of Jovial J73 in avionics systems
p0536 A78-49956

COMPLEMENTARY METAL OXIDE SEMICONDUCTORS
U CMOS

COMPLEX SYSTEMS
Design of multivariable PID controllers with application to a gas-turbine --- Proportional Integral Derivative
p0072 A78-16308
The design process --- computer aided design for complex aerospace systems
[AIAA PAPER 78-1483] p0514 A78-47928

COMPLEX VARIABLES
NT CONFORMAL MAPPING
NT MEROMORPHIC FUNCTIONS
NT ORTHOGONAL FUNCTIONS
NT SINGULARITY (MATHEMATICS)
Factorization methods in hydroaeromechanics --- Russian book
p0378 A78-37887

COMPLEXIT
NT TASK COMPLEXITY

COMPLIANCE (ELASTICITY)
U MODULUS OF ELASTICITY

COMPONENT RELIABILITY
Development of a combined environment test for reliability assessment of avionics systems
p0061 A78-15561
The state of development of ceramic components for gas turbines
[DGLR PAPER 77-072] p0116 A78-18703
Optimum schedule for replacement of aircraft system parts under incomplete information on their reliability
p0164 A78-20879
Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
The error function of analytical structural design --- in aircraft component failure in static tests
p0291 A78-32123
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
NDE: A key to engine rotor life prediction
p0027 N78-10087
Component damage analysis
p0036 N78-11040
FAA lightning protection study: Lightning protection requirements for Wilcox Mark I/D instrument landing system
[AD-A043807] p0036 N78-11044
The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454

COMPOSITE MATERIALS
NT ALUMINUM BORON COMPOSITES
NT BORON REINFORCED MATERIALS
NT BORON-EPOXY COMPOUNDS
NT CARBON FIBER REINFORCED PLASTICS
NT CARBON-CARBON COMPOSITES
NT GLASS FIBER REINFORCED PLASTICS
NT GRAPHITE-EPOXY COMPOSITE MATERIALS
NT LAMINATES
NT METAL MATRIX COMPOSITES
NT POLYMER MATRIX COMPOSITE MATERIALS
NT REINFORCED PLASTICS
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
A new method for cutting honeycomb and composite materials for structural members
p0077 A78-16875
Advanced design composite aircraft program
p0077 A78-16919
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
Trends and research opportunities in airbreathing propulsion
[AIAA PAPER 78-44] p0157 A78-20652
Holographic inspection of jet engine composite fan blades
[SAE PAPER 770975] p0179 A78-23819
Materials and processes - In service performance; Proceedings of the Ninth National Technical Conference, Atlanta, Ga., October 4-6, 1977
p0217 A78-25176
Application of composites on civil aircraft
p0218 A78-25199
Material development for laminar flow control wing panels
p0218 A78-25200
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
New technologies for aircraft structures
p0382 A78-38803
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
Ceramic composite protection for turbine disc bursts --- for the A-300 aircraft
p0026 N78-10083
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
New materials for high temperature turbines; ONERA's DS composites confronted with blade problems
[NASA-TM-75216] p0087 N78-12085
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 1: Materials, design and test
[AD-A046176] p0140 N78-14037
New materials for high temperature turbines: ONERA's DS composites confronted with the blade problems
p0321 N78-21139
PRS composites for advanced gas turbine engine components
[AD-A050595] p0355 N78-22165
Environmental effects on composites for aircraft
[NASA-TM-78716] p0410 N78-25135

Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
Environmental effects on composites for aircraft
p0448 N78-27061
Development of advanced composite structures
p0448 N78-27062
Key issues in application of composites to transport aircraft
p0448 N78-27063
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
Composite structures for commercial transport aircraft
[NASA-TM-78730] p0457 N78-27183
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
New structures made of composite materials for high performance combat aircraft
p0550 N78-30114
Rotor design implications for composite material properties
[UCRL-80117] p0553 N78-30182
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273

COMPOSITE STRUCTURES
NT LAMINATES
UTTAS/HLH rotor blade fabrication and testing --- YUH-61A and XCH-62A helicopters
p0050 A78-13456
Low-cost composite primary structure --- for B-1 aircraft vertical stabilizer
p0069 A78-15855
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943
Design and fabrication of an improved performance, low cost, composite main rotor blade for the Cobra helicopter
p0077 A78-16906
An advanced composite wing for the F-16
p0077 A78-16920
Transport construction costs studied --- composite materials use in aircraft for cost reduction
p0078 A78-17129
Applications of carbon fibre composites in commercial aircraft
p0105 A78-17253
Design problems associated with the B-1 Composite Horizontal Stabilizer
p0109 A78-17890
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Today's non-metallic composite airframe structure An airline assessment
p0218 A78-25196
S-3A composite spoiler in-service evaluation
p0219 A78-25209
Experimental investigation of composite wing failure
[AIAA 78-509] p0279 A78-29809
Composite structures for commercial transport aircraft
p0337 A78-34901
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process specifications
[AD-A046279] p0149 N78-15032
Development of thermoplastic composite aircraft structural elements
[AD-A048468] p0258 N78-19097
Long term experience with a hingeless/composite rotor
p0262 N78-19137
An experimental study to determine the reduction in ultimate bending moment of a composite plate due to an internal delamination
[AD-A052662] p0411 N78-25466
The present status and evolution of the inspection of carbon composite aircraft structures in France
p0444 N78-26478
Detection of flaws in metallic and non-metallic composite structures using liquid crystal technology
p0445 N78-26480
Environmental effects on composites for aircraft
p0448 N78-27061
Development of advanced composite structures
p0448 N78-27062
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] p0457 N78-27184
New structures made of composite materials for high performance combat aircraft
p0550 N78-30114
Advanced composites wing study program, volume 2
[NASA-CR-145382-2] p0613 N78-32186

COMPOSITES
U COMPOSITE MATERIALS

COMPOSITION (PROPERTY)
NT ATMOSPHERIC COMPOSITION
NT CONCENTRATION (COMPOSITION)
NT IONOSPHERIC COMPOSITION
NT MOISTURE CONTENT

COMPRESSED AIR
The start-up of a gas turbine engine using compressed air tangentially fed onto the blades of the basic turbine
p0187 A78-24149
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926

COMPRESSIBILITY
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756

COMPRESSIBILITY EFFECTS
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
Compressibility effects on parachute transient pressures
p0591 A78-51950

COMPRESSIBLE BOUNDARY LAYER
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
Calculation of the compressible boundary layer around a profile
[AAAF-NT-77-08] p0034 N78-11019
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0 --- supersonic heat transfer and skin friction
p0606 N78-32065

COMPRESSIBLE FLOW
NT TRANSONIC FLOW
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
Approximate method of calculating subsonic compressible flows past a lifting wing profile
p0164 A78-20983
Velocity profiles in the Laval nozzle throat for uniform compressible swirling flow
p0165 A78-20905

Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
Compressible flow about helicopter rotors
p0372 A78-36947
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096

COMPRESSION LOADS
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569

COMPRESSION TESTERS
U COMPRESSION TESTS

COMPRESSION TESTS
Experimental investigation of composite wing failure
[AIAA 78-509] p0279 A78-29809

COMPRESSION WAVES
Influence of rarefaction and compression waves on base pressure
p0600 A78-53781

COMPRESSOR BLADES
Finite-difference calculations of three-dimensional transonic flow through a compressor blade row, using the small-disturbance nonlinear potential equations
p0011 A78-12298
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
Supersonic axial compressors with predeceleration by oblique shocks
p0119 A78-19045
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
Application of supercritical airfoil technology to compressor cascades - Comparison of theoretical and experimental results
[AIAA PAPER 78-1138] p0421 A78-41842
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
Compressor blade manufacture by electrochemical machining. Advanced turbine engine gas generator
[AD-A043742] p0030 N78-10110
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy --- jet engine compressor blades
p0444 N78-26468
Core compressor exit stage study. Volume 1: Blading design --- turbofan engines
[NASA-CR-135391] p0501 N78-29099
Computer program for relaxation solutions of the nonlinear small disturbance equations for transonic flow in an axial compressor blade row
[AD-A053744] p0504 N78-29412
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392
Blade row dynamic digital compression program. Volume 2: J85 circumferential distortion redistribution model, effect of Stator characteristics, and stage characteristics sensitivity study
[NASA-CR-134953] p0627 N78-33103

COMPRESSOR EFFICIENCY
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
Aerodynamic behavior of an axial-flow compressor in the presence of inflow disturbances
[DGLR PAPER 77-064] p0116 A78-18706
Loss prediction in axial compressors - A bibliographic study
[CNERA, TP NO. 1978-65] p0383 A78-38892
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108

COMPRESSOR ROTORS
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
Improvements in the calculation of the centrifugal compressor flow by experimental study of the complex rotor flow
[DGLR PAPER 77-062] p0117 A78-18707
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
Composite hub/metal blade compressor rotor
[NASA-CR-135343] p0247 N78-18131
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
A comparison of experimental results and three-dimensional theoretical predictions for a compressor rotor with inlet-distortion, with special reference to Stalling
[CUED/A-TURBO/TR-91] p0362 N78-23092
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
Core compressor exit stage study. Volume 1: Blading design --- turbofan engines
[NASA-CR-135391] p0501 N78-29099

Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108
Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109

COMPRESSORS
NT CENTRIFUGAL COMPRESSORS
NT SUPERSONIC COMPRESSORS
NT TRANSONIC COMPRESSORS
NT TURBOCOMPRESSORS
Rotor-stator interaction noise with hindsight --- turbomachine acoustics
p0329 A78-33093
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer
p0420 A78-41512
10 years of contract research for the pump/compressor industrial concern
p0523 A78-49175
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
An analysis of the rotor blade stresses of the three stage compressor of the Ames Research Center 11- by 11-foot transonic wind tunnel
[NASA-CR-152083] p0209 N78-17061
F100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091
Unsteady blade rows in high-speed flow
[AD-A055620] p0615 N78-32391

COMPUTATION
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Computational aerodynamics requirements in conjunction with experimental facilities --- wind tunnel test data
p0269 N78-19788
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist --- computer systems design
p0269 N78-19789
Critical issues in viscous flow computations
p0270 N78-19792
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
Calculations of maximum A-weighted sound levels dBA --- single aircraft noise levels in airport vicinities
p0460 N78-27872

COMPUTER DESIGN
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
Microprocessor realization of the bus interface unit for a distributed avionic computer system
p0066 A78-15661
Main characteristics of the ADT 4000-4100 digital computer for a hybrid computing system --- for jet engine simulation
p0277 A78-29589
A reliable modular automatic system adapted to avionics controls: Design through successive refinements - Production --- French book
p0281 A78-30024

COMPUTER GRAPHICS
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-0211] p0189 A78-24414
Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
Computer aided design of aircraft electrical systems
p0479 A78-45410
A flight qualified graphics generator --- for B-1 defense system
p0539 A78-50007
Circles, texture, etc. - Alternate approaches to CIG scene detail --- computer image generation for flight simulators
[AIAA 78-1578] p0579 A78-50659
COMPUTROL - A new technique in image generation --- advanced computerized visual environment simulator
[AIAA 78-1579] p0579 A78-50660
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097

COMPUTER METHODS
U COMPUTER PROGRAMS

COMPUTER PROGRAMMING
Organization of a programmed matrix-operation system in an airborne digital computer
p0192 A78-24585
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
The DAIS Executive - An introduction --- avionics computer software
p0534 A78-49932
The versatility of Jovial J73 in avionics systems
p0536 A78-49956
A flight simulation high order language study
p0536 A78-49957
Higher order languages for avionics software - A survey, summary and critique
p0536 A78-49959
Specifications for IDAMST software --- for short takeoff aircraft avionics
[AD-A047163] p0198 N78-16049
Prospects for computational aerodynamics --- integro-differential formulation
p0270 N78-19795
Design and construction of a flight monitor and data recorder --- component selection and software design
[AD-A052405] p0398 N78-24135
Operational Software Concept OSC executive evaluation/refinement
[AD-A055902] p0618 N78-32754

COMPUTER PROGRAMS
NT COMPILERS
NT COMPUTER SYSTEMS PROGRAMS
NT INPUT/OUTPUT ROUTINES
NT NASTRAN
NT OPERATING SYSTEMS (COMPUTERS)
NT SOURCE PROGRAMS
An approach to system integration /BASIC/ --- Basic Avionic Subsystem Integration Concept for Navy weapons system program
[AIAA 77-1500] p0006 A78-12248
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
Modeling of Air Data Computers in test system software
p0065 A78-15650
An advanced computer calculation of ground clutter in an airborne pulse Doppler radar

p0066 A78-15662
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
THREDE - A free-field EMP coupling and scattering code --- electromagnetic scattering from aircraft
p0126 A78-19580
A least square finite element technique for transonic flow with shock
[AIAA PAPER 78-328] p0186 A78-24022
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
A programmable display test unit
p0417 A78-40917
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Second order transonic small perturbation flow
p0424 A78-42198
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
A computerized undergraduate aircraft design course
[AIAA PAPER 78-1492] p0515 A78-47933
Software structured weapon delivery
p0532 A78-49875
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900
An interface management approach to software development
p0535 A78-49933
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
A computer-aided method of calculating temperature fields in turbine disks
p0581 A78-50796
Splined version of FLEXSTAB: A critical analysis of alternate schemes
[NASA-CR-152030] p0020 N78-10027
Validation of a Flexible Aircraft Take-Off and Landing Analysis (FATOLA)
[NASA-TP-1025] p0022 N78-10049
Sensitivity of the Shoe-Box in P001 analysis
[AD-A043707] p0038 N78-11055
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 2: Interpretation of the integrated margin
[AD-A045035] p0086 N78-12078
ENGINEL: A single rotor turbojet engine cycle match performance program
[NASA-CR-145267] p0087 N78-12089
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
F-106 scheduled maintenance study. User's manual --- computer programs
[AD-A045625] p0091 N78-13001
The generation of motion cues on a six-degrees-of-freedom motion system --- computer program
[VTH-LR-248] p0143 N78-14062
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
A discrete-event digital simulation model of the F-16 fire control computer operational flight program using simscript 2.5
[AD-A048164] p0207 N78-17087
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
A simulation model for an enplaning-passenger-vehicle curbside at high-volume airports
p0239 N78-18020
Improvement of flight measuring data with a Kalman filter
[PMVG-FRWT-77-6] p0243 N78-18057
Palefac
[AD-A048331] p0244 N78-18065
IASTOP: A computer code for laser turrets optimization of small perturbation turrets in subsonic or supersonic flow
[AD-A049272] p0255 N78-19076
Analysis and design of a cooled supercritical airfoil test model --- wall temperature effect on boundary layer stability
[AD-A048895] p0265 N78-19168
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
NOISEMAP computer program operator manual. Addendum for version 3.4 of NOISEMAP
[AD-A049070] p0271 N78-19849
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
An improved version of the NASA-Lockheed multielement airfoil analysis computer program
[NASA-CR-145323] p0301 N78-20077
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
A three-dimensional potential-flow program with a geometry package for input data generation
[NASA-CR-145311] p0312 N78-21047
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
Simplified input for certain aerodynamic nose configurations to the Grumman quick-geometry system. A KWIKNOSE user's manual
[AD-A051425] p0394 N78-24089
Use of simulation techniques in the problem of air traffic control
[QUAD-CALC-ELETT-21] p0395 N78-24111

Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements --- computer program
[AD-A051700] p0403 N78-24899
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051
Paneling techniques for use with the VORLAX computer program
[NASA-CR-145364] p0405 N78-25054
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
Slender body theory programmed for bodies with arbitrary cross section --- including fuselages
[NASA-CR-145383] p0437 N78-26102
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133
A computer program for full-coverage film-cooled blading analysis including the effects of a thermal barrier coating
[NASA-TM-78951] p0454 N78-27126
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314
Fatigue crack propagation analysis of aircraft structures
[AD-A053835] p0459 N78-27456
Calculation of laminar boundary layers on infinite swept wings based on Thwaites two-dimensional method
[FFA-AU-1431] p0488 N78-28061
User's guide for a modular flutter analysis software system (fast version 1.0)
[NASA-TM-78720] p0492 N78-28101
FAA remote terminal system
[AD-A054604] p0493 N78-28295
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102
Computer program for relaxation solutions of the nonlinear small disturbance equations for transonic flow in an axial compressor blade row
[AD-A053744] p0504 N78-29412
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation
[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
A calculator program for analyzing airloads on a wing of arbitrary planform and camber in subsonic flow
[AD-A054180] p0545 N78-30058
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Computer program for the design and off-design performance of turbojet and turbofan engine cycles
[NASA-TM-78653] p0551 N78-30122
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KRASH theory
[AD-A055898] p0560 N78-31088
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
DYGABCD: A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110

COMPUTER SIMULATION
U COMPUTERIZED SIMULATION

COMPUTER STORAGE DEVICES
NT RANDOM ACCESS MEMORY
Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718

COMPUTER SYSTEMS DESIGN
An approach to system integration /BASIC/ --- Basic Avionic Subsystem Integration Concept for Navy weapons system program
[AIAA 77-1500] p0006 A78-12248
Peripheral processors for high-speed simulation --- helicopter cockpit simulator
p0052 A78-14063
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics
p0064 A78-15636
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
Digital avionic communication --- computer system design to improve interequipment transmission
p0068 A78-15694
A flexible approach to on-board computer simulation
p0068 A78-15706
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
Development of an on-board minicomputer system
p0124 A78-19435
Integrated flight control system for future transport aircraft
[DGLR PAPER 77-035] p0190 A78-24425
A hierarchical network for avionic systems
p0532 A78-49868
Digital avionics support - A retrospective view of the future
p0533 A78-49903
An interface management approach to software development
p0535 A78-49933
Multi-Function Inertial Reference Assembly /MIRA/ update --- digital aircraft systems
p0535 A78-49941
Digital flight control system - Advanced technology of flight control
p0569 A78-50266
Correlated data bases for the present and future --- aircrew training simulator acquisitions flexibility
[AIAA 78-1583] p0579 A78-50662
The Central Flow Control /CFC/ system --- for Air Traffic Control System Command Center
p0595 A78-52960
System measurement improves computer responses to the controller --- for air traffic control
p0596 A78-52974
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-19778
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
Remarks on future computational aerodynamics requirements --- government/industry relations
p0269 N78-19785
Future requirements and roles of computers in aerodynamics
p0269 N78-19786

Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist --- computer systems design
p0269 N78-19789
Specialized computer architectures for computational aerodynamics
p0270 N78-19814
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
Application techniques for digital flight control systems
p0550 N78-30117

COMPUTER SYSTEMS PROGRAMS
NT INPUT/OUTPUT ROUTINES
NT OPERATING SYSTEMS (COMPUTERS)
Fault tolerant flight controls
p0274 A78-28900
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
The DAIS Executive - An introduction --- avionics computer software
p0534 A78-49932
Higher order languages for avionics software - A survey, summary and critique
p0536 A78-49959
Real-time simulators for augmented inertial navigation systems
p0537 A78-49967
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
Management of software development for advance ATC systems
p0595 A78-52961
Splined version of FLEXSTAB: A critical analysis of alternate schemes
[NASA-CR-152030] p0020 N78-10027
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Fault-tolerant software for aircraft control systems
[NASA-CR-145298] p0251 N78-18797
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787
Software design for a Visually-Coupled Airborne Systems Simulator (VCASS)
[AD-A055226] p0566 N78-31133
A data management system for weight control and design-to-cost
p0635 N78-33780

COMPUTER TECHNIQUES
NT IPAD
Further improvement of the efficiency of computational procedures in flight operations
p0051 A78-13499
EAR navigation update modes --- Electronically Agile Radar
p0066 A78-15667
Computerized test set for the Air Combat Maneuvering Instrumentation
p0068 A78-15700
A Flight Line Computer Loader/Test Controller for improved avionic maintenance
p0068 A78-15701
Remote maintenance monitor systems --- for air navigation equipment
p0111 A78-17911
Computer-aided statistical analysis of the stress-strain state of load-carrying structures
p0131 A78-20267
Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
A review and application of the equivalent deterministic variable technique: The estimation of a STOL aircraft's response to turbulence
[UTIAS-221] p0353 N78-22112
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
Project plan for joint FAA/NASA head-up display concept evaluation
[NASA-TM-78512] p0495 N78-28979
Engineering and Scientific Data Management
[NASA-CP-2055] p0635 N78-33776
CAD/CAM data management needs, requirements and options
p0635 N78-33778

COMPUTERIZED CONTROL
U NUMERICAL CONTROL
COMPUTERIZED DESIGN
NT IPAD
Optimization of helicopter design. I
p0004 A78-12225
Design and implementation of mode control logic in digital autopilots
[AIAA 77-1488] p0005 A78-12238
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
Automated channel and trough-shaped surface design system algorithm --- for aircraft
p0049 A78-13174
Optimalization of helicopter design. II
p0053 A78-14085
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
On the design of aerospace shell structures
p0075 A78-16600
A comparison of three computerized design algorithms for control systems --- for missle and aircraft autopilots
p0107 A78-17527
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
Machine algorithm for determining the cross sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864

Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
Aerodynamic optimization and analysis as part of the computer-aided design process
[AIAA PAPER 78-97] p0172 A78-22572
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
Flight on 0.33 horsepower - The Gossamer Condor
[AIAA PAPER 78-308] p0184 A78-24009
Some aspects of the thermal design of flight vehicles and processing of heat-test data
p0228 A78-27452
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
The problem of choosing design parameters for unpiloted flight-vehicles --- control configured optimization
p0292 A78-32258
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
Taking a new perspective on design --- aeronautical engineering curricula
p0335 A78-34643
Minimum drag surfaces --- for traveling projectiles
p0342 A78-35787
Method for calculating the longitudinal, lateral, and cross aerodynamic derivatives of a flight vehicle at subsonic speeds
p0342 A78-35905
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Tornado development simulation --- computerized aircraft design
p0417 A78-41025
Computer aided design of radial gas turbines - A method for determining the overall rotor dimensions
p0419 A78-41509
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
Integrated time, cost, and performance planning in aircraft development - Computer-aided project management in the development and construction of a modern aircraft
p0473 A78-44823
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Computer aided design of aircraft electrical systems
p0479 A78-45410
The design process --- computer aided design for complex aerospace systems
[AIAA PAPER 78-1483] p0514 A78-47928
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
Development of the can-type gas turbine combustors
p0574 A78-50590
ENGINEL: A single rotor turbojet engine cycle match performance program
[NASA-CR-145267] p0087 N78-12089
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis --- NASTRAN
[AD-A048840] p0254 N78-19065
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
Plotit-method of interactively plotting input data for the vorlax computer program --- computerized aircraft configuration design
[NASA-CR-158896] p0495 N78-28830
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
RIM: A prototype for a relational information management system
p0635 N78-33785

COMPUTERIZED SIMULATION
NT ANALOG SIMULATION
NT DIGITAL SIMULATION

The influence of runway irregularities on the dynamic behavior of aircraft at takeoff
[ONERA, TP NO. 1977-147] p0003 A78-12034
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades
p0012 A78-12311
Simulation as a routine tool for resource and workload planning --- for aircraft engine repair and overhaul cycles
p0052 A78-13850
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
A Navstar/GPS simulator
p0062 A78-15592
Modeling solid-fuel ramjet combustion
p0076 A78-16709
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
Numerical simulation of the interaction of jet and freestream flows in engine exhaust systems
[AIAA PAPER 78-144] p0173 A78-22584
Gas path analysis applied to pre and post overhaul testing of JT9D turbofan engine
[SAE PAPER 770993] p0180 A78-23829
A singular perturbation analysis of optimal aerodynamic and thrust magnitude control
p0183 A78-23900
Multipath fading simulation model and full-scale results --- polarized electromagnetic signal transmission
p0221 A78-25879
Principles and simulation of JTIDS relative navigation --- Joint Tactical Information Distribution System
p0222 A78-26156
Access study and simulation of the Marots communication system
p0226 A78-27027
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
Use of and experience with simulation in the development of the VFW 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942
The HFB 320 airborne simulator of DFVLR as test instrument for determining flight characteristics
[DGLR PAPER 77-082] p0289 A78-31944

Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945
The Dual-Flight-Simulator on the evaluation of air combat effectiveness
[DGLR PAPER 77-080] p0290 A78-31948
New aspects in the movement simulation of the research flight simulator of DFVLR
[DGLR PAPER 77-086] p0290 A78-31950
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
Time delay measurements for flight simulators
p0381 A78-38788
Simulation replay - Implementation and flight simulation applications
p0381 A78-38789
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
A computer-controlled system for fatigue testing under simulated service loading --- for aircraft structures
p0420 A78-41519
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
General aviation dynamics --- aircraft activity forecasting by computerized simulation
p0428 A78-43041
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports
p0428 A78-43053
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Simulation testing via mini computer --- of inertial navigation systems
p0428 A78-43057
Computer simulation of terminal utilization --- for airport planning
p0469 A78-44225
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
Subsystem verification of an AFIC organically developed F-15 simulation --- Air Force Logistics Command
p0533 A78-49901
Real-time simulators for augmented inertial navigation systems
p0537 A78-49967
Improved passenger flow through simulation
p0570 A78-50437
Circles, texture, etc. - Alternate approaches to CIG scene detail --- computer image generation for flight simulators
[AIAA 78-1578] p0579 A78-50659
COMPUTPOL - A new technique in image generation --- advanced computerized visual environment simulator
[AIAA 78-1579] p0579 A78-50660
Area navigation - Fast-time/real-time simulations in a high-altitude center environment
p0596 A78-52977
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
F-4E fire control system simulator, F-4E austere/heads up display (HUD), SEAFAC programs
[AD-A042255] p0031 N78-10124
Simulation model for air traffic control communications
[AD-A044256] p0037 N78-11045
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
High frequency dynamic engine simulation --- TF-30 engine
[NASA-CR-135313] p0097 N78-13059
Computer simulations of ATCRBS processing equipment for use with the aims and transient effects performance prediction models
[AD-A046758] p0139 N78-14025
Aircraft model prototypes which have specified handling-quality time histories
[NASA-CR-143848] p0142 N78-14054
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations --- crack propagation in fighter aircraft
[AD-A042785] p0206 N78-17044
Airport improvement task force delay study: Delay model validation plan
[AD-A048112] p0211 N78-17077
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
A simulation model for an enplaning-passenger-vehicle curbside at high-volume airports
p0239 N78-18020
Numerical aerodynamic simulation facility. Preliminary study extension. Executive summary
[NASA-CR-152106] p0252 N78-19050
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Computational aerodynamics requirements in conjunction with experimental facilities --- wind tunnel test data
p0269 N78-19788
Viscous flow simulations in VTOL aerodynamics --- finite difference technique
p0269 N78-19791
Viscous flow simulation requirements --- of aerodynamic interest
p0270 N78-19793
Finite element concepts in computational aerodynamics
p0270 N78-19801
Review of the Air Force summer study program on the integration of wind tunnels and computers
p0270 N78-19804
Multiprocessing tradeoffs and the wind-tunnel simulation problem
p0270 N78-19805
The impact of a proposed active BCAS on ATCRBS performance in the Washington, D. C., 1981 environment
[AD-A048589/6] p0303 N78-20099
Program for simulation of air traffic and air space structure of the Frankfurt near range, a

planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
Use of simulation techniques in the problem of air traffic control
[QUAD-CALC-ZIPTT-21] p0395 N78-24111
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
A computerized aircraft performance system
p0435 N78-26084
Advanced structural sizing methodology
p0448 N78-27064
Problem-solving with simulation in the world of an air traffic controller
p0451 N78-27098
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation
[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073
Procedures for generation and reduction of linear models of a turbofan engine
[NASA-TP-1261] p0556 N78-30896
Graphics for the hybrid stores separation simulation of the B77 system
[SAND-78-8212] p0562 N78-31099
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
A method for validating missile system simulation models
[AD-A055689] p0613 N78-32169
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089
DYGABCD A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110

COMPUTERS
NT AIRBORNE/SPACEBORNE COMPUTERS
NT ANALOG COMPUTERS
NT DIGITAL COMPUTERS
NT HYBRID COMPUTERS
NT IBM COMPUTERS
NT ILLIAC 4 COMPUTER
NT MINICOMPUTERS
NT PDP 8 COMPUTER
NT UNIVAC 1100 SERIES COMPUTERS
A state-of-the-art assessment of air data sensors for Naval aircraft
[AD-A046500] p0150 N78-15038

CONCENTRATION (COMPOSITION)
NT MOISTURE CONTENT
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618

CONCORDE AIRCRAFT
Some operational experience of Concorde weight and balance
p0110 A78-17892
Concorde AIDS - Powerplant applications --- Airborne Integrated Data Systems
[SAE PAPER 770995] p0181 A78-23831
Problems of supersonic transport
[DGLR PAPER 77-007] p0188 A78-24404
The Concorde v. the United States - Some conclusions
p0224 A78-26474
The Concorde and cosmic rays
p0225 A78-26739
Results of Concorde monitoring
p0340 A78-35655
SST flight planning and navigation - The first year's experience
p0372 A78-37154
Concorde - Ride quality and passenger reactions
p0418 A78-41166
Long-distance focusing of Concorde sonic boom
p0517 A78-48052
British Airways v. Port Authority - Its impact on aircraft noise regulation
p0582 A78-51128
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
Concorde emissions at Dulles International Airport - Results of measurements
p0597 A78-53050
Concorde noise-induced building vibrations: International Airport Dulles --- studies by Langley Research Center
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight (Airbus and Concorde)
p0436 N78-26093
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873

CONCRETES
Quick bearing strength tests for concrete pavements
p0469 A78-44224
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118

CONDENSATES
Transonic flow past an airfoil with condensation
[NASA-TM-75201] p0252 N78-19053

CONDENSATION
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074

CONDENSATION TRAILS
U CONTRAILS

CONDENSING
Condensation and its growth down the test-section of the Langley 0.3-m transonic cryogenic tunnel
[AIAA 78-811] p0296 A78-32365

CONDITIONS
NT ADIABATIC CONDITIONS
NT FLIGHT CONDITIONS
NT RUNWAY CONDITIONS
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118

CONDUCTIVE HEAT TRANSFER
Steady-state bulk temperature field in cooled turbine blades
p0187 A78-24156
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791

CONDUCTORS
NT BUS CONDUCTORS
NT ELECTRIC WIRE
NT ELECTROLYTES

CONES
NT ABLATIVE NOSE CONES
NT CONICAL BODIES

NT NOSE CONES
NT SLENDER CONES
CONFERENCES
Digital Avionics Systems Conference, 2nd, Los Angeles, Calif., November 2-4, 1977, Collection of Technical Papers and Supplement
p0004 A78-12226
Design to cost/life cycle costing; Proceedings of the Conference, Washington, D.C., November 16-18, 1977
p0169 A78-21838
Materials and processes - In service performance; Proceedings of the Ninth National Technical Conference, Atlanta, Ga., October 4-6, 1977
p0217 A78-25176
All-Union Seminar on Inverse and Conjugate Problems of Heat Transfer, 2nd, Moscow, USSR, October 19-21, 1976, Proceedings
p0228 A78-27451
1977 report to the aerospace profession; Proceedings of the Twenty-first Symposium, Beverly Hills, Calif., October 12-15, 1977
p0232 A78-28451
Problems of the theory of strength related to aircraft construction and civil engineering; Structural Mechanics Meeting, Ottobrunn, West Germany, June 1, 2, 1977, Lectures and Discussion Contributions
p0382 A78-38802
Beryllium 1977; International Conference, 4th, London, England, October 4-7, 1977, Conference Preprints
p0472 A78-44706
Atmospheric Flight Mechanics Conference, Palo Alto, Calif., August 7-9, 1978, Technical Papers
p0482 A78-46526
Tokyo Joint Gas Turbine Congress, Tokyo, Japan, May 22-27, 1977, Proceedings
p0573 A78-50576
Gesellschaft fuer angewandte Mathematik und Mechanik, Annual Scientific Meeting, Lyngby, Denmark, May 31-June 3, 1977, Reports. Part 2
p0583 A78-51151
Air Traffic Control Association, Annual Meeting, 22nd, Las Vegas, Nev., October 10-13, 1977, Proceedings and Supplement
p0594 A78-52951
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Research in airport pavements --- conference
[AD-A043179] p0031 N78-10120
Aircraft engine emissions --- conference
[NASA-CP-2021] p0038 N78-11063
Secondary flows in turbomachines
[AGARD-CP-214] p0041 N78-11083
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
Proceedings of the 1977 Image Conference --- simulating visual perception for flight simulators
[AD-A044582] p0090 N78-12109
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
Technical evaluation report on the 49th(B) Propulsion and Energetics Specialists Meeting on Power Plant Reliability
[AGARD-AR-110] p0141 N78-14048
Technical evaluation report on the 49th(A) Propulsion and Energetics Panel Specialists' Meeting on Secondary Flows in turbomachines
[AGARD-AR-109] p0142 N78-14052
Preliminary QCSEE program test results
[NASA-TM-73732] p0151 N78-15042
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
Rotorcraft Design
[AGARD-CP-233] p0261 N78-19126
Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-19778
High temperature problems in gas turbine engines
[AGARD-CP-229] p0319 N78-21118
Unsteady aerodynamics --- conference emphasizing numerical analysis of three dimensional flows
[AGARD-CP-227] p0345 N78-22033
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
Powered-Lift Aerodynamics and Acoustics --- conferences
[NASA-SP-406] p0389 N78-24046
Guidance and control design considerations for Low-Altitude and Terminal-Area Flight
[AGARD-CP-240] p0431 N78-26049
Performance Prediction Methods
[AGARD-CP-242] p0434 N78-26074
Non-destructive inspection relationships to aircraft design and materials --- conferences
[AGARD-CP-234] p0443 N78-26460
CTOL transport technology, 1978 --- conferences
[NASA-CP-2036-PT-1] p0446 N78-27046
Technical evaluation report on the 24th Guidance and Control Panel technical meeting: Symposium on Applications of Advances in Navigation to Guidance and Control
[AGARD-AR-115] p0452 N78-27109
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
CTOL Transport Technology, 1978 --- conferences
[NASA-CP-2036-PT-2] p0496 N78-29046
Proceedings of the Workshop on Engine-Airframe Integration Short-Haul Aircraft
[AD-A053417] p0499 N78-29088
Fighter aircraft design --- conferences
[AGARD-CP-241] p0549 N78-30099
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055
Technical evaluation report on the 51st (A) Specialists' Meeting of the Propulsion and Energetics Panel on Icing Testing for Aircraft Engines
[AGARD-AR-124] p0612 N78-32105
Helicopter Acoustics
[NASA-CP-2052-PT-1] p0618 N78-32816
Engineering and Scientific Data Management
[NASA-CP-2055] p0635 N78-33776
CONFIGURATION MANAGEMENT
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
CONFIRMATION
U PROVING
CONFLUENCE
U CONVERGENCE
CONFORMAL MAPPING
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
The aerodynamic design of cascade airfoils - A new exact method based on conformal mapping
p0121 A78-19072
Uniformly precise conformal mapping of the exterior of a circle onto the exterior of a wing section
p0174 A78-22642
Construction of airfoil profiles approximating a given profile
p0485 A78-46588
Uniformly exact conformal transformation of exterior of circle onto exterior of wing profile
p0518 A78-48224
Description of a five-parameter profile family --- Geckeler-Mueller conformal mapping method for airfoil profiles
[VTH-LR-220] p0138 N78-14011
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
CONFORMAL TRANSFORMATIONS
U CONFORMAL MAPPING
CONGRESSIONAL REPORTS
Airport and aircraft noise reduction
[GPO-91-591] p0326 N78-21891

Future needs and opportunities in the air traffic control system
[GPO-98-931] p0559 N78-31076
CONICAL BODIES
NT SLENDER CONES
Pressure distribution over sharp-nosed cones situated at angles of attack from 0 to 10 degrees in supersonic flow
p0165 A78-20889
Swirl flow in conical diffusers
p0230 A78-27910
Linearized Newtonian aerodynamics of slender inflated cones
[AD-A048695] p0254 N78-19064
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
CONICAL CAMBER
Remarks on conical supersonic wings with subsonic leading edges
p0333 A78-34016
CONICAL FLOW
Supersonic flow near a thin trapezoidal wing
p0166 A78-20921
Hypersonic flow past a conical wing with detached shock wave at the leading edges
p0169 A78-22078
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
CONICAL NOZZLES
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report --- outdoor static and 40 x 80 ft. wind tunnel tests
[NASA-CR-152076] p0271 N78-19899
CONICAL SHELLS
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
CONICS
NT HYPERBOLAS
CONNECTIONS
U JOINTS (JUNCTIONS)
CONNECTORS
NT ELECTRIC CONNECTORS
Fiber optic development for tactical fighter applications
p0534 A78-49906
CONNECTORS (ELECTRIC)
U ELECTRIC CONNECTORS
CONOIDS
U CONICAL BODIES
CONSERVATION
NT ENERGY CONSERVATION
CONSOLES
Dulles control tower console design study
[AD-A056200] p0566 N78-31132
CONSTANT SPEED PROPELLERS
U VARIABLE PITCH PROPELLERS
CONSTANT VOLUME BALLOONS
U SUPERPRESSURE BALLOONS
CONSTRAINTS
NT METEOROLOGICAL PARAMETERS
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
CONSTRUCTION
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
CONSTRUCTION INDUSTRY
The employment of helicopters in construction engineering and assembly operations in the German Democratic Republic
p0050 A78-13498
CONSTRUCTION MATERIALS
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
Glass airports --- building design
p0570 A78-50434
Naval structural materials - Requirements, issues, and opportunities
p0583 A78-51149
Analysis of permanent deformations of flexible airport pavements
[AD-A044269/9] p0099 N78-13079
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183
CONSUMPTION
NT ENERGY CONSUMPTION
NT FUEL CONSUMPTION
CONTACTS (ELECTRIC)
U ELECTRIC CONTACTS
CONTAINERS
Development of an ultra high level airdrop container concept
[AD-A046156] p0138 N78-14017
Gondola system for helicopter transport of external cargo
[AD-A047560] p0306 N78-20120
CONTAINMENT
Report on aircraft engine containment
[SAE AIR 1537] p0472 A78-44705
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049
CONTAMINANTS
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
CONTAMINATION
Driver gas contamination in a high-enthalpy reflected shock tunnel
p0223 A78-26235
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
CONTINENTS
NT EUROPE
CONTINUOUS WAVE RADAR
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
CONTINUUM MECHANICS
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
Some problems of continuum mechanics --- Russian book
p0580 A78-50751
CONTOURS
Analysis and calculation of plane skew symmetric contours of second-order smoothness --- for channel surface design
p0174 A78-22636
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640

Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
A study of test section configuration for shock tube testing of transonic airfoils
[NASA-CR-157237] p0442 N78-26153
CONTRACT MANAGEMENT
On setting avionic subsystem unit production cost goals --- contract management and procurement policy
[AD-A051337] p0398 N78-24133
CONTRACTS
Reliability, Improvement Warranty (RIW) and contract evaluation
[AD-A048244] p0250 N78-18441
CONTRAILS
Assessment of atmospheric condensation nuclei associated with jet aircraft traffic
[AD-A054319] p0504 N78-29705
CONTROL
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
System optimization by periodic control
[AD-A049522] p0323 N78-21162
A frequency domain approach to handling qualities design
p0357 N78-23019
CONTROL BOARDS
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
Instructor pilot's role in simulation training, phase 2
[AD-A047919] p0212 N78-17082
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Development of a programmable panel
[AD-A048469] p0258 N78-19098
CONTROL CONFIGURED VEHICLES
A multifunctional guidance and control system --- for CCV F-104G aircraft
p0064 A78-15640
System description and performance characteristics of a quad redundant strapdown inertial navigation and flight control system
p0065 A78-15641
The fighter control configured vehicle /CCV/ program development and flight test summary
p0125 A78-19444
The problem of choosing design parameters for unpiloted flight-vehicles --- control configured optimization
p0292 A78-32258
Optimization of the design parameters of finned pilotless flight vehicles
p0293 A78-32269
Flight mechanics today and tomorrow - Balance and perspectives --- aircraft design, control and dynamics simulation
p0337 A78-34942
Evolution of aircraft design through the CCV concept
p0416 A78-40868
A perspective of laminar-flow control --- aircraft energy efficiency program
[AIAA PAPER 78-1528] p0481 A78-46503
Highly survivable integrated avionics
p0523 A78-49163
Assessment of dynamic coordinate alignment for elastic aircraft --- flight control Kalman filter estimates
p0538 A78-49987
Analytical study of ride smoothing benefits of control system configurations optimized for pilot handling qualities
[NASA-TP-1148] p0246 N78-18076
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089
CONTROL DEVICES
U CONTROL EQUIPMENT
CONTROL EQUIPMENT
NT PRESSURE REGULATORS
Instrumentation and control for a large engine test facility
p0107 A78-17584
F-16's ISAs reduce cost, weight, and leakage --- hydraulic integrated servoactuators for flight control
p0108 A78-17737
Detection of sensor failure and output reconstruction for aircraft engine controls
[AIAA PAPER 78-4] p0157 A78-20627
Fly-by-wire flight control
p0280 A78-29935
A camera system for small format aerial photography
p0337 A78-34873
Aviation control system devices --- Russian book
p0529 A78-49850
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
Aircraft compensator design methods
[AD-A047814] p0210 N78-17073
Fabrication and test of digital output interface devices for gas turbine electronic controls
[NASA-CR-135427] p0455 N78-27129
Airport Surface Detection Equipment (ASDE-3) project plan
[AD-A052362] p0457 N78-27144
Control system design using vector-valued performance criteria with application to the control rate reduction in parameter insensitive control systems
[DLR-FB-77-55] p0565 N78-31125
Closed loop control systems. Part 2: Miscellaneous applications. A bibliography with abstracts
[NTIS/PS-78/0810/8] p0632 N78-33278
CONTROL MOMENT GYROSCOPES
Influence of constrained arrestors on the operation of gyroscopic stabilizers
p0585 A78-51355
CONTROL PANELS
U CONTROL BOARDS
CONTROL SIMULATION
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
A flexible approach to on-board computer simulation
p0068 A78-15706
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
Using simulation to determine the transfer function of the electronic part of a control loop --- for gas turbine aircraft engines
p0277 A78-29584
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
User delay cost model for a terminal control area
p0427 A78-43039
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
A simplified instrument failure detection scheme
p0481 A78-46377
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
Digital control law synthesis in the w prime domain
p0507 A78-46962
Air traffic control in the terminal area - Use of a simulation technique for the definition of an operative model
p0527 A78-49733
A qualitative analysis of redundant asynchronous operation
p0531 A78-49863
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865

Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Optimal regulator or conventional? Setup techniques for a model following simulator control system
p0357 N78-23020

CONTROL STABILITY
A proposed scheme for maneuver-dependent control of stability
p0050 A78-13417
A root locus property of the extended Bass algorithm
p0053 A78-14349
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- applied to STOL autopilot design
p0114 A78-18464
YC-15 development and test highlights - Phase III
p0233 A78-28457
Estimation of the aerodynamic stability and control parameters for the P-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
Stability and control flight test techniques, volume 2 --- pilot training handbook
[AD-A042593] p0030 N78-10113
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Aircraft model prototypes which have specified handling-quality time histories
[NASA-CR-143848] p0142 N78-14054
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085

CONTROL SURFACES
NT AERIAL RUDDERS
NT AILERONS
NT ELEVATORS (CONTROL SURFACES)
NT ELEVONS
NT EXTERNALLY BLOWN FLAPS
NT FLAPS (CONTROL SURFACES)
NT GUIDE VANES
NT HORIZONTAL TAIL SURFACES
NT JET FLAPS
NT JET VANES
NT LEADING EDGE SLATS
NT SPOILERS
NT TRAILING-EDGE FLAPS
NT WING FLAPS
Analysis of lateral dynamic stability of an airplane with deformable control systems. II - Numerical analysis
p0108 A78-17642
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
An aerofoil with control surface in incompressible viscous flow
p0175 A78-23050
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
Material development for laminar flow control wing panels
p0218 A78-25200
Tunnel interference assessment by boundary measurements
p0284 A78-30689
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Flutter of control surfaces with structural nonlinearities --- missile control surfaces
[AD-A045221] p0099 N78-13073
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
Heavy lift helicopters. Advanced Technology component program: Hub and upper controls
[AD-A051348] p0396 N78-24122
Two-dimensional aerofoils and control surfaces in simple harmonic motion in incompressible inviscid flow
[ARC-CP-1392] p0545 N78-30068
Control-surface hinge-moment calculations for a high-aspect-ratio supercritical wing
[NASA-TM-78664] p0557 N78-31043
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils
[AD-A055140] p0558 N78-31047

CONTROL SYSTEMS
U CONTROL

CONTROL THEORY
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Multiple control input design for identification of light aircraft
p0114 A78-18466
Use of the singular perturbation method to investigate automatic control systems --- for automatic pilot
p0163 A78-20802
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
Tentative establishment of a mathematical model of a turbojet engine as a controlled system
p0229 A78-27567
Observability criteria for nonlinear dynamic systems subjected to multiparameter measurements --- noting air navigation applicability
p0274 A78-29089
The helicopter as a control object --- Russian book
p0276 A78-29401
Optimal control synthesis in distributed systems with incomplete information --- noting aircraft applications
p0518 A78-48215

Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
Optimization techniques for air traffic control problems --- Russian book
p0522 A78-48504
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
Circulation control airfoil study --- wind tunnel stability tests
[AD-A048677] p0237 N78-18005
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112
Optimal control theory (OWEN) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
Advanced control concepts for future fighter aircraft
p0549 N78-30104
A learning control system with application to flight systems
p0629 N78-33112

CONTROL VALVES
Properties of hydraulic servomotor controlled by flapper valve or by edge valve --- turbojet engine system
p0277 A78-29587

CONTROLLABILITY
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
A technique for the assessment of fighter aircraft precision controllability
[AIAA 78-1364] p0484 A78-46553
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
Test instrumentation system for flight simulator handling characteristics
[AIAA 78-1595] p0579 A78-50669
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
Intermittent positive control. Phase 1 Operational test and evaluation
[AD-A047249] p0195 N78-16030
Study of the application of an implicit model-following flight controller to lift-fan VTOL aircraft
[NASA-TP-1040] p0199 N78-16063
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111

CONTROLLED ATMOSPHERES
NT CABIN ATMOSPHERES

CONTROLLED STABILITY
U CONTROL
U STABILITY

CONTROLLERS
NT SERVOMECHANISMS
NT SERVOMOTORS
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
Analog versus digital null-steering controllers
p0227 A78-27039
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145

CONVAIR MILITARY AIRCRAFT
U MILITARY AIRCRAFT

CONVAIR 340 AIRCRAFT
U CV-340 AIRCRAFT

CONVECTION
NT FREE CONVECTION
Investigations of the local heat transfer coefficient of a convection cooled rotor blade
p0319 N78-21126

CONVECTIVE FLOW
Experimental verification of a blade cooling system and comparison with design calculation --- in high temperature test turbine
p0573 A78-50583
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058

CONVECTIVE HEAT TRANSFER
Combustion in gas turbine engines - A review of ONERA recent works
[ONERA, TP NO. 1978-25] p0386 A78-39580
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792

CONVERGENCE
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687

CONVERGENT NOZZLES
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058

CONVERGENT-DIVERGENT NOZZLES
Nonequilibrium reverse flow in a Laval nozzle
p0128 A78-19681
Velocity profiles in the Laval nozzle throat for uniform compressible swirling flow
p0165 A78-20905
Calculation of the Laval-nozzle flow by a modified Lax-Wendroff method of second-order accuracy
p0166 A78-20970
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
Uniqueness 'in the large' of the solution to the direct problem of the Laval nozzle
p0376 A78-37613
Construction of higher approximations in the problem of special flows in plane laval nozzles
p0426 A78-42764
Numerical study of flow in axisymmetric Laval nozzles, taking account of overexpansion with flow separation

p0429 A78-43114
The effect of two-dimensionality of the flow of a gas with stepwise distribution of total parameters on the integral characteristics of a Laval nozzle
p0429 A78-43116
Investigation of nonequilibrium two-phase flows in axisymmetric Laval nozzles
p0518 A78-48244
The aerodynamic performance of a freely hinged door between two flows --- for supersonic transport propulsion nozzles
p0586 A78-51464
CONVERTAPLANES
U V/STOL AIRCRAFT
CONVEXITY
The fluid dynamics of rarefied molecular flow over convex bodies - A new theory and applications
p0229 A78-27588
COOLANTS
NT ENGINE COOLANTS
The influence of coolant turbulence intensity on film cooling effectiveness
p0321 N78-21136
COOLING
NT AIR COOLING
NT FILM COOLING
NT LIQUID COOLING
NT SUPERCOOLING
NT SURFACE COOLING
NT SWEAT COOLING
NT THERMOELECTRIC COOLING
Steady-state bulk temperature field in cooled turbine blades
p0187 A78-24156
Analysis and design of a cooled supercritical airfoil test model --- wall temperature effect on boundary layer stability
[AD-A048895] p0265 N78-19168
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
COOLING FINS
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
COOLING SYSTEMS
Aircraft avionics cooling, present and future
p0060 A78-15558
Ultra high power transformers for airborne applications
p0063 A78-15625
Optimization of the cooling system of an air-cooled internal combustion engine
p0419 A78-41510
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
Experimental verification of a blade cooling system and comparison with design calculation --- in high temperature test turbine
p0573 A78-50583
Impingement cooling and its application to combustor design
p0573 A78-50584
Energy economy with high temperature gasturbine
p0575 A78-50604
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
High temperature problems in gas turbine engines
[AGARD-CP-229] p0319 N78-21118
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
Measuring techniques in high temperature turbines
p0322 N78-21151
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894
COORDINATE SYSTEMS
U COORDINATES
COORDINATES
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
COPILOTS
U AIRCRAFT PILOTS
COPPER ALLOYS
NT BRONZES
CORES
NT HONEYCOMB CORES
CORNER FLOW
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
Some special boundary layer problems /20th Ludwig Prandtl Memorial Lecture/ --- aircraft wing stall characteristics
p0176 A78-23295
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Interaction of turbulent boundary layers in a right-angle corner
p0588 A78-51697
Experiments on the laminar flow in a rectangular streamwise corner
p0600 A78-53765
An investigation of corner separation within a thrust augmenter having Coanda jets
[AD-A052131] p0366 N78-23392
CORPUSCULAR RADIATION
NT ELECTRON BEAMS
CORRECTION
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external stores
[DLR-FB-77-21] p0238 N78-18014
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064
CORRELATION
NT AUTOCORRELATION
NT CROSS CORRELATION
NT DATA CORRELATION
NT SIGNAL ANALYSIS
Two point correlations of jet noise
p0176 A78-23219
Correlation of microstructure with fracture toughness properties in metals, part 3 --- titanium alloys
[AD-A043741] p0045 N78-11238
CORRELATION FUNCTIONS
U CORRELATION
CORRELATORS
NT IMAGE CORRELATORS
Design of a collision avoidance system model with statistical interrogation --- separation and collision avoidance by nonsynchronous techniques (SECANT)
p0304 N78-20107
CORRIDORS
NT GREAT PLAINS CORRIDOR (NORTH AMERICA)
CORROSION
NT CAVITATION CORROSION
NT FUEL CORROSION
NT STRESS CORROSION
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188
The macroscopic detection of corrosion in aluminum aircraft structures with thermal neutron beams and film imaging methods
[PB-277074/1] p0364 N78-23214
Surface corrosion evaluation by relative magnetic susceptibility measurements
p0443 N78-26466
CORROSION PREVENTION
Coatings for fretting prevention
p0178 A78-23441
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197

Coatings for aircraft which operate in marine environments
p0468 A78-44113
Operation of oil seales of aircraft piston engines under conditions of cavitation. I
p0507 A78-47175
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces --- aging of airframe materials
[AD-A045277] p0096 N78-13049

CORROSION RESISTANCE
NT OXIDATION RESISTANCE
Erosion resistant coatings --- for aircraft parts
p0120 A78-19056
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
The need for improved materials in integral aircraft fuel tanks
p0217 A78-25177
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Halogenated solvent-induced corrosion in hydraulic systems --- hydraulic drives for aircraft radar antennas
[ASLE PREPRINT 78-AM-4A-2] p0378 A78-38083
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys
p0427 A78-43015
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-145207] p0022 N78-10047
High temperature corrosion-resistant protective coatings in stationary gas turbines
[NASA-TM-75181] p0086 N78-12080
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112
Aircraft structural life monitoring and the problem of corrosion
p0554 N78-30281
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
Ceramics technology readiness development program. Phase 1: Conceptual designs and material screening --- erosion/corrosion resistance
[PE-2786-12] p0632 N78-33243

CORROSION TESTS
NT SALT SPRAY TESTS
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188

CORRUGATED PLATES
Shear buckling of corrugated plates with quasi-sinusoidal corrugations
p0616 N78-32458

CORSAIR AIRCRAFT
U A-7 AIRCRAFT

COSMIC RADIATION
U COSMIC RAYS

COSMIC RAYS
The Concorde and cosmic rays
p0225 A78-26739

COST ANALYSIS
Saving raw materials or saving energy in aircraft construction
p0053 A78-14285
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
Life cycle costing, a design tool - Nuances and caveats
p0060 A78-15554
Environmental tests and logistics support costs
p0061 A78-15560
Weight and cost in the design arena --- in aircraft development
p0109 A78-17884
Designing to cost /DTC/LCC/
p0110 A78-17894
The policy problems and economics of aircraft noise
p0122 A78-19128
Design to cost/life cycle costing; Proceedings of the Conference, Washington, D.C., November 16-18, 1977
p0169 A78-21838
Big fans for the airlines
p0170 A78-22269
Advanced turboprop propulsion system reliability and maintenance cost
[SAE PAPER 771009] p0182 A78-23841
The effect of fuel consumption on cost developments
p0469 A78-44197
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
Technical-economic analysis of the direct operating costs of air transport companies --- German thesis
p0589 A78-51752
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
A study of opportunistic replacement tactics for modular jet engine management
[AD-A044184] p0079 N78-12001
Economic problems of determining the durability of aircraft engines
[AD-A044672] p0088 N78-12096
Uncertainties in airport cost analysis and their effect on site selection
p0089 N78-12104
A critique of aircraft airframe cost models
[AD-A047181] p0198 N78-16048
Remoteness-compensation methodology for benefit/cost establishment and discontinuance criteria
[AD-A043836] p0201 N78-16074
Preliminary limited surveillance radar (LSR) cost/benefit analysis
[AD-A046829] p0201 N78-16245
Determination of the flight equipment maintenance costs of commuter airlines
[NASA-CR-152069] p0213 N78-17931
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
Technical and financial fall-out on armed forces from commercial and export helicopter programmes
p0264 N78-19150
A new method for estimating current and future transport aircraft operating economics
[NASA-CR-145190] p0303 N78-20094
A life cycle cost study of contractor versus organic support of aircraft programs

[AD-A049438] p0312 N78-21045
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
Aircraft size and air transport costs
p0395 N78-24112
Is production of the CH-53E helicopter warranted
[PB-278815/6] p0453 N78-27116
Avionics cost development for alternatives of selected air traffic control systems
[AD-A054823] p0547 N78-30080
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097

COST EFFECTIVENESS
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
Experience in using high-modulus carbon fibre --- in Viggen wing panels
p0077 A78-16896
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
Wing with fork tips as means of increasing cost effectiveness of transport aircraft
[DGLR PAPER 77-017] p0189 A78-24410
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
Optimal aperture-shape for an antenna array --- for radio navigation of flight vehicles
p0228 A78-27406
The Dual-Flight-Simulator as an aid for a government mission specialist
[DGLR PAPER 77-079] p0290 A78-31949
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
The optimum shape of the aperture of an antenna array --- for radio navigation of aircraft
p0598 A78-53257
Avionics maintenance study
[AD-A042568] p0017 N78-10003
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
Reliability, Improvement Warranty (RIW) mid contract evaluation
[AD-A048244] p0250 N78-18441
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
Improving readiness: A cost-effective approach
[AD-A050765] p0345 N78-22021
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
Cost-effectiveness of flight simulators for military training. Volume 1: Use and effectiveness of flight simulators
[AD-A052801] p0400 N78-24156
Proposal for a cost effective radar navigation system for low altitude and terminal area flight
p0431 N78-26057
The economic implications of NDE: Opportunities and payoff
p0443 N78-26463
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060

COST ESTIMATES
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
An identification and characterization of cost models/techniques used by Air Force Logistics Command to estimate jet engine operation and support costs
[AD-A044083] p0088 N78-12095
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process specifications
[AD-A046279] p0149 N78-15032
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
Development of cost estimating relationships for aircraft jet core-engine overhaul costs
[AD-A047667] p0209 N78-17067
Life cost management, methodology, and case studies
[AD-A052388] p0404 N78-24999
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report
[AD-A054016] p0550 N78-30119
Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100

COST REDUCTION
Energy conservation in aeronautical ground testing
p0002 A78-11103
Adaptation for economization, or adaptation for the economization of energy --- in transport aircraft design and operation
p0003 A78-12030
A new concept in integrated reference systems --- avionics cost reduction
[AIAA 77-1497] p0006 A78-12245
Multi-system position determination - An innovative approach to low cost area navigation
[AIAA 77-1513] p0007 A78-12258
Improved operational maintenance forcasting techniques
p0052 A78-13848
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
A contractor's perception of design to life cycle cost
p0060 A78-15553
Transport construction costs studied --- composite materials use in aircraft for cost reduction
p0078 A78-17129
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Application of skin technology to turbine blades --- zero gravity manufacture
[AIAA PAPER 78-285] p0163 A78-20792
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
The AN/ARC-164 radio - Life-cycle-cost savings --- UHF communication equipment reliability and maintainability improvement
p0276 A78-29479
Benefits of strapdown over gimbal INS systems for aircraft application
p0282 A78-30253
Remotely piloted aircraft in the civil environment
p0283 A78-30506
FAA facilities maintenance cost reduction model
p0428 A78-43043
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858

Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0458 N78-29082

COSTS
NT AIRPLANE PRODUCTION COSTS
NT LOW COST
Establishment of new major public airports in the United States
[AD-A046462] p0201 N78-16075
Research Requirements for the improvement of helicopter operations
p0263 N78-19147
On setting avionic subsystem unit production cost goals --- contract management and procurement policy
[AD-A051337] p0398 N78-24133
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043

COUNTERMEASURES
NT ELECTRONIC COUNTERMEASURES
NT JAMMING

COUPLED MODES
A high-power switching network for a dual-mode antenna --- for airborne transmitter application
p0383 A78-38844

COUPLERS
A high-power switching network for a dual-mode antenna --- for airborne transmitter application
p0383 A78-38844

COUPLING
NT CROSS COUPLING
NT OPTICAL COUPLING
The internal fields coupled through apertures
p0036 N78-11035

COUPLINGS
Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings
[AD-A053834] p0455 N78-27133
A study of the effect of the rotor coil couplings of a synchronous machine on its predicted transient response
p0632 N78-33330

COWELL METHOD
U NUMERICAL INTEGRATION

COWLINGS
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648

CRACK FORMATION
U CRACK INITIATION

CRACK INITIATION
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
Stress intensity factors, for collinear cracks in a stiffened sheet --- aircraft structures
p0378 A78-38122
Application of a flight-line disk crack detector to a small engine
p0027 N78-10088
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics --- A-U461, A-U26N T6
[AAAF-NT-77-35] p0403 N78-24587

CRACK PROPAGATION
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Fracture analysis of aerospace metals
p0175 A78-22724
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
The strength of structures and the applications of the fracture mechanics
p0178 A78-23574
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress --- aircraft structural failures
p0332 A78-33700
Fatigue crack propagation of titanium alloys under dwell-time conditions
p0387 A78-39596
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
Fatigue crack growth of titanium fan blades
p0589 A78-51744
Effect of fighter attack spectrum on crack growth
[AD-A042369] p0037 N78-11054
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations --- crack propagation in fighter aircraft
[AD-A042785] p0206 N78-17044
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
Calculation methods for fatigue life and crack propagation
p0241 N78-18049
Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
Titanium damage tolerant design data for propulsion systems --- gas turbine engine components
[AD-A053252] p0442 N78-26202
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455
Fatigue crack propagation analysis of aircraft structures
[AD-A053835] p0459 N78-27456
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminium alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095
Load interaction effects in fatigue crack propagation
p0555 N78-30285
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
Recent developments in analysis of crack propagation and fracture of practical materials --- stress analysis in aircraft structures
[NASA-TM-78766] p0556 N78-30606
Compilation of test data from an investigation on the effect of environment on crack growth under flight-simulation loading
[NLR-TR-76096-U] p0556 N78-30620
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions --- airframe fatigue cracking
[AD-A055483] p0617 N78-32504
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483

CRACKING (FRACTURING)
NT STRESS CORROSION CRACKING
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
Case studies in fracture mechanics
[AD-A045877] p0102 N78-13482

The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
CRACKS
NT SURFACE CRACKS
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
Stress intensity factors for a cracked hole in a row of holes --- using compounding technique
[RAE-TP-77073] p0154 N78-15525
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0411 N78-25455
CRAFT
U VEHICLES
CRANES
An experimental and analytical investigation of the hovering and forward flight characteristics of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091
CRASH LANDING
NT DITCHING (LANDING)
Survival after a crash
p0072 A78-16280
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Antimisting fuel kinematics related to aircraft crash landings
p0230 A78-28147
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
Theoretical investigation on the crash behavior of cell structures --- aircraft structural design
p0382 A78-38805
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
Light airplane crash tests at impact velocities of 13 and 27 m/sec
[NASA-TP-1042] p0020 N78-10034
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
Aircraft accident report: Southern Airways Inc., DC-9-31, N1335U, New Hope, Georgia, April 4, 1977
[NTSB-AAR-78-3] p0314 N78-21064
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
CRASHES
NT CRASH LANDING
NT DITCHING (LANDING)
Full-scale aircraft crash tests of modified jet fuel
[AD-A043843] p0045 N78-11251
Tests of crash-resistant fuel system for general aviation
[AD-A054141] p0490 N78-28081
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
General aviation airplane structural crashworthiness user's manual. Volume 3: Related design information
[AD-A054266] p0499 N78-29085
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KRASH theory
[AD-A055898] p0560 N78-31088
CRAZING
U SURFACE CRACKS
CREEP PROPERTIES
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
CREEP RUPTURE STRENGTH
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213
CRESTATRONS
U TRAVELING WAVE TUBES
CREVICES
U CRACKS
CREWS
NT FLIGHT CREWS
CRITERIA
NT STRUCTURAL DESIGN CRITERIA
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043785] p0354 N78-22117
CRITICAL LOADING
Taking structural and technological constraints into account in the design of maximum-stiffness load-bearing structures
p0164 A78-20880
CRITICAL MACH NUMBER
U CRITICAL VELOCITY
U MACH NUMBER
CRITICAL REYNOLDS NUMBER
U CRITICAL VELOCITY
U REYNOLDS NUMBER
CRITICAL SPEED
U CRITICAL VELOCITY
CRITICAL STRESS
U CRITICAL LOADING
CRITICAL VELOCITY
The effect of aerodynamic interference of wing and horizontal tail assembly on the critical velocity of flutter of a flight vehicle
p0126 A78-19633
DSTR/501-M62B dynamic interface critical speed problem
[AD-A042441] p0042 N78-11108
CROSS CORRELATION
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
CROSS COUPLING
Design of noninteracting flight control systems in the presence of large parameter variations
[NASA-CR-155589] p0200 N78-16064
CROSS FLOW
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
Cross-flow characteristics on a cylindrical body at incidence in subsonic flow
p0373 A78-37406
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
Distortion of a flat jet in a bounded cross-stream in the presence of a wake space
p0580 A78-50779
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392
CROSS SECTIONS
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245

CRUCIFORM WINGS
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
CRUDE OIL
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
Aviation fuels - A supplier's perspective
p0287 A78-31308
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
CRUISE MISSILES
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
Key beam weapons tests slated --- for aircraft carrier particle beam defense against cruise missiles
p0597 A78-53238
The multirole cruise missile
p0600 A78-53716
CRUISING FLIGHT
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
CRUSADER AIRCRAFT
U F-8 AIRCRAFT
CRYOGENIC FLUID STORAGE
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
CRYOGENIC FLUIDS
NT LIQUID HYDROGEN
NT LIQUID OXYGEN
CRYOGENIC WIND TUNNELS
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
An intermittent high-Reynolds-number wind tunnel
p0130 A78-20193
An intermittent high Reynolds number wind tunnel
[AIAA 78-766] p0293 A78-32327
Condensation and its growth down the test-section of the Langley 0.3-m transonic cryogenic tunnel
[AIAA 78-811] p0296 A78-32365
Application of cryogenics in experimental aerodynamics
p0522 A78-48982
The 0.1m subsonic cryogenic tunnel at the University of Southampton
[NASA-CR-145305] p0247 N78-18086
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
CRYOGENICS
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
CRYSTAL OSCILLATORS
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
A compensation technique for acceleration-induced frequency changes in crystal oscillators
p0530 A78-49859
CRYSTALLIZATION
Increasing the resources of jet fuels
p0003 A78-11699
CRYSTALS
NT CRYSTAL OSCILLATORS
NT LIQUID CRYSTALS
CUBES (MATHEMATICS)
The dynamics of non spherical particles --- aerodynamic translational mobility of cubes and cylinders
[AD-A047144] p0256 N78-19080
CUMULATIVE DAMAGE
The damage sum in fatigue of structure components
p0226 A78-26834
CURING
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273
CURL (VECTORS)
NT VORTICITY
CURRENT DENSITY
Surface current and charge density induced on aircraft
p0169 A78-21990
CURRENTS
NT EXTERNAL SURFACE CURRENTS
CURTISS-WRIGHT MILITARY AIRCRAFT
U MILITARY AIRCRAFT
CURVED PANELS
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
CURVED SURFACES
U CONTOURS
U SURFACES
CUSHIONCRAFT GROUND EFFECT MACHINE
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
CUT-OUTS
U OPENINGS
CUTTING
A new method for cutting honeycomb and composite materials for structural members
p0077 A78-16875
CV-340 AIRCRAFT
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
CW RADAR
U CONTINUOUS WAVE RADAR
CYCLES
NT BRAYTON CYCLE
NT STRESS CYCLES
NT THERMODYNAMIC CYCLES
CYCLIC LOADS
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
CYLINDRICAL AFTERBODIES
U AFTERBODIES
U CYLINDRICAL BODIES
CYLINDRICAL ANTENNAS
Current and scattering field of a long short-circuited receiving vibrator --- aircraft antenna compatibility
p0339 A78-35467
CYLINDRICAL BODIES
NT ROTATING CYLINDERS
Cross-flow characteristics on a cylindrical body at incidence in subsonic flow
p0373 A78-37406
Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
The internal magnetic fields created by diffusion
p0036 N78-11034
The dynamics of non spherical particles --- aerodynamic translational mobility of cubes and cylinders
[AD-A047144] p0256 N78-19080

Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0 --- supersonic heat transfer and skin friction
p0606 N78-32065
Analysis of a high speed ring valve system for a single cylinder reciprocating compressor
p0633 N78-33442

CYLINDRICAL CHAMBERS
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670

CYLINDRICAL SHELLS
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
Cutout reinforcement of stiffened cylindrical shells
[AIAA 78-512] p0279 A78-29811
On sound transmission into a heavily-damped cylinder --- aircraft noise in fuselage
p0285 A78-31019
Natural frequencies of a soft heavy cylindrical shell under the effect of internal pressure
p0580 A78-50717
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457

CYLINDROIDS
U CYLINDRICAL BODIES

D

DAEMO (DATA ANALYSIS)
U DATA PROCESSING
U DATA REDUCTION
U DATA TRANSMISSION

DAMAGE
NT CUMULATIVE DAMAGE
NT FIRE DAMAGE
NT IMPACT DAMAGE
NT RADIATION DAMAGE
NT STORM DAMAGE
Component damage analysis
p0036 N78-11040
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122

DAMPERS
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DET-33] p0135 A78-20598

DAMPING
NT ELASTIC DAMPING
NT VIBRATION DAMPING
NT VISCOELASTIC DAMPING
NT VISCOUS DAMPING
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
An analysis of the flutter and damping characteristics of helicopter rotors
p0030 N78-10111
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061
Measurement of the pitch damping on two AGARD B models in the FFA S4 and S5 wind tunnels
[FFA-AU-556] p0438 N78-26112
Dynamic nondestructive testing of materials
p0444 N78-26470

DAMPING FACTOR
U DAMPING

DAMPING IN PITCH
U DAMPING
U PITCH (INCLINATION)

DAMPING IN ROLL
U DAMPING
U ROLL

DAMPING IN YAW
U DAMPING
U YAW

DAMPING TESTS
Steady-state unbalance response of a three-disk flexible rotor on flexible, damped supports
p0275 A78-29326

DAMPNESS
U MOISTURE CONTENT

DART TURBOPROP ENGINES
U TURBOPROP ENGINES

DASSAULT AIRCRAFT
Interavia combat aircraft design analysis. I - Dassault-Breguet Mirage 2000
p0328 A78-32850
Mirage 2000 - Dassault's better delta
p0523 A78-49169
Performance predictions of Marcell Dassault-Breguet Aviation aircraft
p0435 N78-26085

DATA ACQUISITION
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics
p0064 A78-15636
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
Multiple laser tracker operations
p0124 A78-19438
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
Data acquisition in the case of a jet-engine test stand
p0335 A78-34488
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
The role of the computer in the flight testing of general aviation aircraft
[AIAA PAPER 78-1465] p0512 A78-47914
The 4m x 2m industrial aerodynamics wind tunnel
[OUEL-1188/77] p0100 N78-13085
Aircraft hazard detection and control utilizing an aircraft data acquisition system
[AD-A054416] p0500 N78-29092
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089
TRSB microwave landing system demonstration program at Shiraz, Iran
[AD-A055526] p0625 N78-33071
Bell UH-1H RAM/LOG report
[AD-A057231] p0626 N78-33091

DATA ADAPTIVE EVALUATOR/MONITOR
U DATA PROCESSING
U DATA REDUCTION
U DATA TRANSMISSION

DATA ANALYSIS
U DATA PROCESSING
U DATA REDUCTION

DATA BASES
Correlated data bases for the present and future --- aircrew training simulator acquisitions flexibility
[AIAA 78-1583] p0579 A78-50662
Technical data requirements for shipboard and shorebased vertical/short takeoff and landing V/STOL aircraft
[AD-A054102] p0500 N78-29093
Engineering and Scientific Data Management
[NASA-CP-2055] p0635 N78-33776
CAD/CAM data management needs, requirements and options
p0635 N78-33778

A data management system for weight control and design-to-cost
p0635 N78-33780
DATA BUSSES
U CHANNELS (DATA TRANSMISSION)
DATA COMPACTION
U DATA COMPRESSION
DATA COMPRESSION
Digitized radar data compressor --- for air traffic control
[AD-A057442] p0632 N78-33290
DATA CORRELATION
NT SIGNAL ANALYSIS
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques --- in the Langley V/STOL tunnel
[NASA-TP-1168] p0325 N78-21410
DATA HANDLING SYSTEMS
U DATA SYSTEMS
DATA LINKS
ARINC communications addressing and reporting system /ACARS/ - The data link that got implemented and why
[AIAA 77-1522] p0008 A78-12263
Controller productivity in the pre-data link era
p0064 A78-15635
Aircraft Satellite Data Link
p0338 A78-34971
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles --- of ground-to-aircraft wideband data links
p0592 A78-52360
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
DATA MANAGEMENT
AN/ARN-101 test and evaluation --- data management techniques for Digital Modular Avionics System
p0065 A78-15644
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
The design process --- computer aided design for complex aerospace systems
[AIAA PAPER 78-1483] p0514 A78-47928
An interface management approach to software development
p0535 A78-49933
TESTPLT: Interactive computer procedure for wind-tunnel-data management, retrieval, comparison, and plotting
[NASA-TM-78663] p0309 N78-20144
Engineering and Scientific Data Management
[NASA-CP-2055] p0635 N78-33776
CAD/CAM data management needs, requirements and options
p0635 N78-33778
A data management system for weight control and design-to-cost
p0635 N78-33780
RIM: A prototype for a relational information management system
p0635 N78-33785
DATA PROCESSING
NT CENTRAL ELECTRONIC MANAGEMENT SYSTEM
NT DATA CORRELATION
NT DATA REDUCTION
NT MULTIPROCESSING (COMPUTERS)
NT PARALLEL PROCESSING (COMPUTERS)
NT SIGNAL ANALYSIS
NT SIGNAL PROCESSING
Airline viewpoint on systems development and integration --- avionics information processing
[AIAA 77-1496] p0006 A78-12244
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
Keeping pace with avionics innovations --- data processing in navigation and tracking
p0069 A78-15712
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
Observational computation in the case of redundant measurements --- for position sensor data in radio navigation systems
p0176 A78-23133
A computer-based system for processing dynamic data --- from aircraft gas turbine engine strain measurements
p0372 A78-37108
The new system for processing and presenting radar data in the Air Traffic Control Center of Barcelona
p0383 A78-38997
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
PHAROS, processor for harmonic analysis of the response of oscillating surfaces --- Wind tunnel models
[NLR-MP-77012-U] p0238 N78-18019
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063
DATA PROCESSING EQUIPMENT
NT AIRBORNE/SPACEBORNE COMPUTERS
NT ANALOG COMPUTERS
NT COMPUTERS
NT DIGITAL COMPUTERS
NT HYBRID COMPUTERS
NT IBM COMPUTERS
NT ILLIAC 4 COMPUTER
NT MICROPROCESSORS
NT MINICOMPUTERS
NT PDP 8 COMPUTER
NT UNIVAC 1100 SERIES COMPUTERS
DATA READOUT SYSTEMS
U DATA SYSTEMS
U DISPLAY DEVICES
DATA RECORDING
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
Development of a breadboard system for recording ATC displays
p0595 A78-52964
DATA REDUCTION
A new analysis method for determination of FAA stall speed
p0124 A78-19440
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
Aircraft electrical system testing and data reduction using digital techniques
p0535 A78-49937
A review of human factors investigation studies in aircraft accidents during the period 1957-1977 in Aeromedical Laboratory, JASDF
p0587 A78-51497
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report --- outdoor static and 40 x 80 ft. wind tunnel tests
[NASA-CR-152076] p0271 N78-19899
DATA SAMPLING
The effect of prefilter design on sample rate

selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
DATA SYSTEMS
JTIDS - An update --- Joint Tactical Information Distribution System
[AIAA 77-15211 p0008 A78-12262
Instrumentation and control for a large engine test facility
p0107 A78-17584
Douglas Aircraft Company laser tracker
p0124 A78-19436
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
Concorde AIDS - Powerplant applications --- Airborne Integrated Data Systems
[SAE PAPER 770995] p0181 A78-23831
Runway roughness characterization by DDS approach --- Dynamic Data System
p0284 A78-30679
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
AIDS in military aircraft --- Airborne Integrated Data Systems Computer
p0510 A78-47866
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
AIDS - Aircraft-integrated-data-system
p0600 A78-53675
Investigation of a high speed data handling system for use with multispectral aircraft scanners
[NASA-TM-78689] p0310 N78-20481
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283
DATA TRANSMISSION
A comparative evaluation of modem techniques for simultaneous data and range measurement --- aircraft position location and data communication via satellite
[AIAA 77-1474] p0005 A78-12231
Satellite images to aircraft in flight --- GEOS image transmission feasibility analysis
p0056 A78-14982
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
Flight tests of digital data transmission --- MSK - a quadrature PSK system
p0285 A78-31050
Aircraft Satellite Data Link
p0338 A78-34971
Data transmission aboard aircraft
p0417 A78-40869
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
An optical fibre, multi-terminal data system for aircraft
p0202 N78-16849
DATING
U TIME MEASUREMENT
DC 8 AIRCRAFT
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037
DC 9 AIRCRAFT
Aircraft accident report: Texas International Airlines, Inc., Douglas DC-9-14, N9104, Stapleton International Airport, Denver, Colorado, 16 November 1976
[NTISUB/C/104-010] p0257 N78-19087
Aircraft accident report: Southern Airways Inc., DC-9-31, N1335U, New Hope, Georgia, April 4, 1977
[NTSB-AAB-78-3] p0314 N78-21064
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
DC 10 AIRCRAFT
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Winglet and long duct nacelle aerodynamic development for DC-10 derivatives
p0496 N78-29049
DE HAVILLAND AIRCRAFT
The use of the total-head rise across the propeller of the De Havilland Canada DHC-2 beaver as a similarity parameter to simulate power-on flight in the wind tunnel
[VTH-190] p0149 N78-15022
Flight measurements of the wing tip vortex
p0449 N78-27074
DE LAVAL NOZZLES
U CONVERGENT-DIVERGENT NOZZLES
DEADWEIGHT
U STATIC LOADS
DEBRIS
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
DEBUGGING
U CHECKOUT
DEBYE TEMPERATURE
U SPECIFIC HEAT
DECAY
NT ACOUSTIC EMISSION
NT FLUORESCENCE
NT PARTICLE EMISSION
NT RADIO EMISSION
NT SHOCK WAVE LUMINESCENCE
NT X RAY FLUORESCENCE
DECAY RATES
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
DECCA NAVIGATION
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
DECELERATION
NT SPIN REDUCTION
Supersonic axial compressors with predeceleration by oblique shocks
p0119 A78-19045
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
A new analysis method for determination of FAA stall speed
p0124 A78-19440
Ejection under deceleration
[AD-A046117] p0138 N78-14018
Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115
Equipment permitting fuel savings during approach
[AAAF-NT-77-27] p0397 N78-24130
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110
DECELERATORS
U BRAKES (FOR ARRESTING MOTION)
DECISION ELEMENTS
U LOGICAL ELEMENTS
DECISION MAKING
Taking a new perspective on design --- aeronautical engineering curricula
p0335 A78-34643
The missed approach --- psychological factors in aircraft instrument landing decisions
p0587 A78-51517
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070
DECODERS
Two-channel method of processing interval codes --- for navigation systems
p0429 A78-43085
DECOUPLING
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138

DEFENSE COMMUNICATIONS SATELLITE SYSTEM
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
DEFLATING
U INFLATABLE STRUCTURES
DEFLECTION
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration --- in the Langley V/STOL tunnel
[NASA-TP-1090] p0092 N78-13014
DEFLECTORS
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100
DEFORMATION
NT ELASTIC BENDING
NT ELASTIC DEFORMATION
NT PLASTIC DEFORMATION
NT TENSILE DEFORMATION
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
DEFROSTING
Aircraft defogging and defrosting (transparent area)
[AD-A056976] p0626 N78-33094
DEGREES OF FREEDOM
Six degrees of freedom system for store separation studies in ONERA wind-tunnels
[ONERA, TP NO. 1977-100] p0191 A78-24460
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054
DEHYDRATION
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
DEICERS
Feasibility analysis for a microwave deicer for helicopter rotor blades
[AD-A042581] p0022 N78-10052
Icing problems on helicopter rotors
[BR59303] p0140 N78-14032
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
Freeze-thaw tests of liquid deicing chemicals on selected pavement materials
[AD-A051771] p0493 N78-28279
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096
DEICING
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
The design of aircraft and helicopter protection systems --- Russian book
p0070 A78-15937
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327
DEICING SYSTEMS
U DEICERS
DELAMINATING
An experimental study to determine the reduction in ultimate bending moment of a composite plate due to an internal delamination
[AD-A052662] p0411 N78-25466
DELAY
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
DELTA DAGGER AIRCRAFT
U F-102 AIRCRAFT
DELTA DART AIRCRAFT
U F-106 AIRCRAFT
DELTA WINGS
Strain gage calibration of a complex wing
p0071 A78-16182
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
Solution of the problem of three-dimensional flow past a delta wing with subsonic edges by a modification of the Lax-Wendroff method
p0128 A78-19696
Determination of pressure impulses at supersonic delta wings with incident weak shock waves
p0129 A78-19729
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
Calculation of the mean flow characteristics at the inlet to the air intake located under a delta wing
p0165 A78-20895
The effect of blunting the leading edge of a delta wing on its aerodynamic characteristics during supersonic flight
p0166 A78-20920
Two new correlation dependencies for parameters of flow on a plane delta wing
p0166 A78-20933
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Hypersonic gas flow past a flat delta wing
p0166 A78-20966
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
Hypersonic flow past a conical wing with detached shock wave at the leading edges
p0169 A78-22078
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Normal force of a flat triangular wing in a supersonic flow
p0278 A78-29720
Influence of slip on the aerodynamic behavior of a wing at hypersonic speeds
p0342 A78-35916
Flow past nonconical wings with separation
p0377 A78-37775
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Strake-wing analysis and design
[AIAA PAPER 78-1201] p0423 A78-41891
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
Mirage 2000 - Dassault's better delta
p0523 A78-49169
Generalized area rules and integral theorems for hypersonic wing-bodies
p0571 A78-50461
Effects of external stores on the aerodynamic characteristics of a 60 deg delta-wing fighter model at Mach 1.60 to 2.87 --- conducted in the Langley Unitary Plan wind tunnel
[NASA-TM-74090] p0081 N78-12033

The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
Configuration heating for a hypersonic research airplane concept having a 70 deg swept double-delta wing
[NASA-TP-1143] p0366 N78-23389
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
Calculations of the effects of blowing from the leading edges of a cambered delta wing
[ARC-R/M-3800] p0545 N78-30064
Aerodynamics of the new generation of combat aircraft with delta wings
p0549 N78-30106
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057
Estimation of leading-edge thrust for supersonic wings of arbitrary planform
[NASA-TP-1270] p0623 N78-33051
DEMAND (ECONOMICS)
Airport choice in low demand region
p0229 A78-27547
General aviation dynamics --- aircraft activity forecasting by computerized simulation
p0428 A78-43041
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979
Demand modelling of passenger air travel: An analysis and extension, volume 2
[NASA-CR-157402] p0545 N78-30069
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061
DEMODULATORS
NT MODEMS
DEMONSTRATION
U PROVING
DENSITY (MASS/VOLUME)
NT GAS DENSITY
DENSITY (NUMBER/VOLUME)
NT ELECTRON DENSITY (CONCENTRATION)
DENSITY (RATE/AREA)
U FLUX DENSITY
DENSITY MEASUREMENT
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298
DEPENDENCE
NT TIME DEPENDENCE
DEPLOYMENT
Deployment forces in towing systems --- by aircraft
p0188 A78-24365
DEPOSITION
NT ELECTROPLATING
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
DEPTH PERCEPTION
U SPACE PERCEPTION
DESCENT
NT PARACHUTE DESCENT
Lost range, fuel and time due to climb and descent: Propeller-driven aeroplanes
[FSDU-77015] p0084 N78-12066
DESCENT TRAJECTORIES
Strategic positioning and traffic regulation in the terminal zone
p0217 A78-25150
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113
DESCRIPTIVE GEOMETRY
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046
DESIGN ANALYSIS
Optimalization of helicopter design. II
p0053 A78-14085
Design considerations for ECM systems in attack and fighter aircraft
p0054 A78-14928
The aerodynamic design of blower tunnels with wide-angle diffusers
p0075 A78-16647
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Design to cost/life cycle costing; Proceedings of the Conference, Washington, D.C., November 16-18, 1977
p0169 A78-21838
Performance-optimized horizontal-axis wind turbines
p0170 A78-22232
Design and analysis of propellers for low Reynolds number application to mini-RPV's
[SAE PAPER 770999] p0181 A78-23834
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
Interavia combat aircraft design analysis. I - Dassault-Breguet Mirage 2000
p0328 A78-32850
A rigid airship concept for future naval operations
[AIAA PAPER 77-1195] p0333 A78-34014
Remarks on design of supersonic wind tunnels
p0369 A78-36216
Design for flying --- Book
p0371 A78-36498
Aircraft engine design and development through lessons learned
p0419 A78-41507
Analysis of pavements designed by CBR equation --- California Bearing Ratio for airfield pavements
p0426 A78-42856
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
Expendable design concept --- applied to gas generator for jet fuel starter
[AIAA PAPER 78-964] p0463 A78-43523
An empirical/analytical design methodology for gas turbine combustors
[AIAA PAPER 78-998] p0464 A78-43545
Verification of landing gear design strength
[SAE AIR 1494] p0472 A78-44701
Design philosophy for engine forgings
p0509 A78-47452
Design philosophy for airframes
p0509 A78-47453
A computerized undergraduate aircraft design course
[AIAA PAPER 78-1492] p0515 A78-47933
Effect of performance objectives on the design and cost of future USAF pilot training aircraft
[AIAA PAPER 78-1498] p0515 A78-47938
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497
Linear machine power requirements and system comparisons --- for German magnetic levitation revenue vehicles
p0585 A78-51271
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
Some current problems in simulator design, testing and use
[AD-A043240] p0044 N78-11127
Design considerations in mechanical face seals for improved performance. 1: Basic configurations
[NASA-TM-73735] p0101 N78-13439
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
Fatigue design of fighters: Guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft
[AGARD-AG-231] p0241 N78-18046

Fatigue design of fighters; guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft: General survey
p0241 N78-18047
Modern concepts for aerodynamic rotor design
[DLR-IB-151-77/11] p0243 N78-18058
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
Life cost management, methodology, and case studies
[AD-A052388] p0404 N78-24999
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088
Primary Adhesively Bonded Structure Technology (PABST). Phase 1: Detail design
[AD-A056857] p0626 N78-33095

DESIGN OF EXPERIMENTS
U EXPERIMENTAL DESIGN
DESPINNING
U SPIN REDUCTION
DETECTION
NT AIRCRAFT DETECTION
NT RADAR DETECTION
NT SIGNAL DETECTION
NT TARGET RECOGNITION
NT ULTRASONIC FLAW DETECTION
DETECTORS
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120
DETERIORATION
Detecting abnormal turbine engine deterioration using electrostatic methods
[AIAA PAPER 78-1473] p0513 A78-47919
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
DEVELOPING NATIONS
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
DEVITRIFICATION
U CRYSTALLIZATION
DEW
A current weather information display system for use at airports
p0213 N78-17600
DIAGNOSIS
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
DIAGRAMS
NT S-N DIAGRAMS
DIALS
The effects of eliminating minor graduations on dial reading performance
[AD-A046709] p0150 N78-15039
DIAMOND WINGS
U LOW ASPECT RATIO WINGS
U SWEPT WINGS
DIATOMIC GASES
Similar solutions in nonequilibrium nozzle flows
p0221 A78-25728
DIELECTRIC MATERIALS
U DIELECTRICS
DIELECTRIC PROPERTIES
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
DIELECTRICS
NT RADOME MATERIALS
Interaction of thick film dielectric, conductor, and alumina substrate for DCU201 aircraft controller
[SAND-78-0069] p0493 N78-28349
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327
DIESEL ENGINES
General aviation internal combustion engine research programs at NASA-Lewis Research Center
[AIAA PAPER 78-932] p0462 A78-43505
Lightweight, low compression aircraft diesel engine --- converting a spark ignition engine to the diesel cycle
[NASA-CR-135300] p0325 N78-21471
DIESEL FUELS
Comparison tests on the 100-GPM electrokinetic fuel decontaminator and a 100-GPM military standard filter/separator
[AD-A048655] p0248 N78-18226
DIFFERENTIAL ALGEBRA
U MATRICES (MATHEMATICS)
DIFFERENTIAL ANALYZERS
U ANALOG COMPUTERS
DIFFERENTIAL EQUATIONS
NT VORTICITY EQUATIONS
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996
Prospects for computational aerodynamics --- integro-differential formulation
p0270 N78-19795
DIFFERENTIAL OPERATORS
U DIFFERENTIAL EQUATIONS
U OPERATORS (MATHEMATICS)
DIFFRACTION
NT WAVE DIFFRACTION
NT X RAY DIFFRACTION
DIFFRACTION PATTERNS
Study of gas flows with shearing interferometers
p0327 A78-32622
DIFFUSERS
The aerodynamic design of blower tunnels with wide-angle diffusers
p0075 A78-16647
Swirl flow in conical diffusers
p0230 A78-27910
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
A major refurbishing program for the NAE 5-ft. x 5-ft. blowdown wind tunnel
p0415 A78-40725
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
Performance of the Vortex-Controlled Diffuser /VCD/ in an annular combustor flowpath
p0572 A78-50574
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
Surge responsibility and range characteristics of centrifugal compressors
p0577 A78-50616
Calculation of viscous flow in straight weakly divergent diffusors
p0583 A78-51158
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
Inviscid flow through wide-angle diffuser with actuator disk --- for wind turbine augmentation
p0597 A78-53095
DIFFUSION
NT ATMOSPHERIC DIFFUSION
NT MAGNETIC DIFFUSION
NT PARTICLE DIFFUSION
DIFFUSION BONDING
U DIFFUSION WELDING
DIFFUSION COEFFICIENT
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
DIFFUSION THEORY
Determination of the constants of the diffusion theory of fatigue fracture
p0132 A78-20289
DIFFUSION WELDING
Application of new joining techniques in small gas turbines
[DGLR PAPER 77-070] p0116 A78-18705

Boron-aluminum composite materials
p0130 A78-20146
Diffusion brazing titanium sandwich structures
p0587 A78-51524
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
DIGITAL COMMAND SYSTEMS
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
Highly survivable integrated avionics
p0523 A78-49163
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
Concept and future plans for automation of air traffic control in the Federal Republic of Germany
p0596 A78-52972
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
Engineering and development program plan: Advanced Integrated Flight Systems (AIFS)
[AD-A056770] p0630 N78-33119
DIGITAL COMMUNICATION
U PULSE COMMUNICATION
DIGITAL COMPUTERS
NT ILLIAC 4 COMPUTER
NT MINICOMPUTERS
NT PDP 8 COMPUTER
NT UNIVAC 1100 SERIES COMPUTERS
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
Microprocessor realization of the bus interface unit for a distributed avionic computer system
p0066 A78-15661
Organization of a programmed matrix-operation system in an airborne digital computer
p0192 A78-24585
Main characteristics of the ADT 4000-4100 digital computer for a hybrid computing system --- for jet engine simulation
p0277 A78-29589
The role of the computer in the flight testing of general aviation aircraft
[AIAA PAPER 78-1465] p0512 A78-47914
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
Research and development of digital jet-engine controls
p0578 A78-50626
Effect of digitally computed drives on performance of continuous linear systems
[NASA-TN-D-8518] p0022 N78-10045
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
Palefac
[AD-A048321] p0244 N78-18065
Future requirements and roles of computers in aerodynamics
p0269 N78-19786
Description and theory of operation of the computer by-pass system for the NASA F-8 digital fly-by-wire control system
[NASA-CR-144865] p0349 N78-22076
Application techniques for digital flight control systems
p0550 N78-30117
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KRASH theory
[AD-A055898] p0560 N78-31088
DIGITAL DATA
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
DIGITAL FILTERS
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
A performance analysis of a radar tracking filter --- digital Kalman filter for aircraft targets
p0107 A78-17564
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
Digital spectral analysis and filtering of experimental aerodynamic data
[SAND-77-0225] p0093 N78-13022
DIGITAL INTEGRATORS
Analog versus digital null-steering controllers
p0227 A78-27039
DIGITAL NAVIGATION
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
NASA's advanced control law program for the F-8 digital fly-by-wire aircraft
p0013 A78-12357
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
A-7 ALOFT demonstration and economic analysis --- fiber optics interface for navigation and weapons delivery
p0054 A78-14939
Aircraft R-Nav system connected on optical bus
p0054 A78-14941
A multifunctional guidance and control system --- for CCV F-104G aircraft
p0064 A78-15640
System description and performance characteristics of a quad redundant strapdown inertial navigation and flight control system
p0065 A78-15641
Flight-control/navigation inertial reference system
p0065 A78-15642
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
Observational computation in the case of redundant measurements --- for position sensor data in radio navigation systems
p0176 A78-23133
Mission management in the airport vicinity --- digital flight control for terminal maneuvering area
[DGLR PAPER 77-037] p0190 A78-24427
Generalized algorithm of the analytical method of gyrocompassing
p0216 A78-25013
Principles and simulation of JTIDS relative navigation --- Joint Tactical Information Distribution System
p0222 A78-26156
In-line monitoring of digital flight control computers
p0531 A78-49860
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060
DIGITAL RADAR SYSTEMS
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634

AIRTRACK - A system for air traffic control
p0073 A78-16376
The technology for the automatic tracking of targets of surveillance and secondary radar
p0073 A78-16377
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
Some results on digital chirp --- radar design
p0222 A78-26160
On the possibility of classifying radar targets with a coherently measured echo signal --- German book
p0293 A78-32308
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
Aircraft radar systems --- Russian book
p0377 A78-37873
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
Moving target detector /MTD/ radar system
p0595 A78-52963
Development of a breadboard system for recording ATC displays
p0595 A78-52964
The direct access radar channel - A distributed minicomputer system
p0596 A78-52976
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
Digitized radar data compressor --- for air traffic control
[AD-A057442] p0632 N78-33290

DIGITAL SIMULATION
Digital real time simulation of the F-5E/F flight director computer
[AIAA 77-1528] p0008 A78-12267
Finite difference procedure for unsteady transonic flows - A review
p0011 A78-12294
Finite-difference calculations of three-dimensional transonic flow through a compressor blade row, using the small-disturbance nonlinear potential equations
p0011 A78-12298
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
Statistical modeling of optimal GTE parameter trimming
p0049 A78-13173
Peripheral processors for high-speed simulation --- helicopter cockpit simulator
p0052 A78-14063
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
Digital simulation of aircraft flight path dynamics using quaternions
[AIAA PAPER 78-311] p0185 A78-24012
Digital computer program maneuver pilot
p0290 A78-31946
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182
Tornado development simulation --- computerized aircraft design
p0417 A78-41025
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Digital control law synthesis in the w prime domain
p0507 A78-46962
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
Air-to-air designate/track with time sharing
p0538 A78-49977
Guidance and navigation for automatic landing, rollout and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
A discrete-event digital simulation model of the F-16 fire control computer operational flight program using simscript 2.5
[AD-A048164] p0207 N78-17047
Numerical aerodynamic simulation facility. Preliminary study extension
[NASA-CR-152107] p0252 N78-19051

DIGITAL SYSTEMS
NT DIGITAL NAVIGATION
NT DIGITAL RADAR SYSTEMS
Digital Avionics Systems Conference, 2nd, Los Angeles, Calif., November 2-4, 1977, Collection of Technical Papers and Supplement
p0004 A78-12226
Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Analog to digital airplanes - One easy step
[AIAA 77-1469] p0005 A78-12228
Digital avionics overview airframe manufacturers' update
[AIAA 77-1470] p0005 A78-12229
FAA role of certification - Advanced aircraft systems
[AIAA 77-1472] p0005 A78-12230
Design and implementation of mode control logic in digital autopilots
[AIAA 77-1488] p0005 A78-12238
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
DAIS - Design and performance --- Digital Avionics Information System
[AIAA 77-1499] p0006 A78-12247
Digital avionics, active controls, and the FAA Advanced integrated flight systems /AIFS/
[AIAA 77-1503] p0006 A78-12250
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251
Flight experience with a fail-operational digital fly-by-wire control system
[AIAA 77-1507] p0007 A78-12253
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
Integration, installation, and flight test of a fail passive digital automatic flight control system in a jet transport aircraft
[AIAA 77-1514] p0008 A78-12259
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
RPV video digital multiplexing system
p0063 A78-15613
The F-16 sampled data assembly
p0063 A78-15618
Compatibility testing and integration of DAIS multiplex bus equipments --- Digital Avionics Information System
p0064 A78-15638

AN/ARN-101 test and evaluation --- data management techniques for Digital Modular Avionics System
p0065 A78-15644
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
The digital airplane --- military avionics
p0126 A78-19547
Integrated flight control system for future transport aircraft
[DGLR PAPER 77-035] p0190 A78-24425
From analog to digital control systems - Improved performance by means of advanced technology --- used for commercial aircraft
[DGLR PAPER 77-036] p0190 A78-24426
The year for shaping a digital operations R&D program --- for ATC
p0231 A78-28218
Use of a stepping motor for measuring fuel quantity in a digital system for control of rotational speed
p0277 A78-29586
New trends and problem areas in automatic flight control
p0282 A78-30252
Flight tests of digital data transmission --- MSK - a quadrature PSK system
p0285 A78-31050
FAA's certification position on advanced avionics
p0335 A78-34642
A computer-based system for processing dynamic data --- from aircraft gas turbine engine strain measurements
p0372 A78-37108
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0484 A78-46559
Stability augmentation by eigenvalues control and model matching
p0507 A78-46965
Design and development of a multifunctional helicopter control system
p0524 A78-49396
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
Digital avionics support - A retrospective view of the future
p0533 A78-49903
Multi-Function Inertial Reference Assembly /MIRA/ update --- digital aircraft systems
p0535 A78-49941
Digital area correlation tracker
p0536 A78-49951
Digital system architecture for a 1980's jammer --- for military aircraft and ships
p0537 A78-49973
A flight qualified graphics generator --- for B-1 defense system
p0539 A78-50007
Triplex digital fly-by-wire redundancy management techniques
[AIAA 78-1279] p0541 A78-50187
The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
Digital flight control system - Advanced technology of flight control
p0569 A78-50266
Applications for airborne digital communications
p0590 A78-51896
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
The evaluation of a digital hardware voter/monitor in an aircraft control system
[AD-A043979] p0043 N78-11117
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
Specifications for IDAMST software --- for short takeoff aircraft avionics
[AD-A047163] p0198 N78-16049
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Description and theory of operation of the computer by-pass system for the NASA F-8 digital fly-by-wire control system
[NASA-CR-144865] p0349 N78-22076
An adaptive learning control system for aircraft
[NASA-CR-156930] p0413 N78-25966
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
Fabrication and test of digital output interface devices for gas turbine electronic controls
[NASA-CR-135427] p0455 N78-27129
Inherent errors in asynchronous digital flight controls
[AD-A055649] p0565 N78-31124
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098

DIGITAL TECHNIQUES
Real-time digitally driven graphic-display systems in aircraft simulations
p0069 A78-15707
New aspects in the movement simulation of the research flight simulator of DFVLR
[DGLR PAPER 77-086] p0290 A78-31950
Aircraft electrical system testing and data reduction using digital techniques
p0536 A78-49937
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
A digital continuously updated two minute mean windspeed indicator for use at airports
p0213 N78-17598

DIGITAL TRANSDUCERS
Angle detector
[NASA-CASE-ARC-11036-1] p0616 N78-32395

DIHEDRAL EFFECT
U LATERAL STABILITY

DIMENSIONAL MEASUREMENT
Recent developments in automatic testing
p0108 A78-17663

DIMENSIONAL STABILITY
NT SHELL STABILITY
NT STRUCTURAL STABILITY

DIMENSIONLESS NUMBERS
NT FROUDE NUMBER
NT MACH NUMBER
NT PRANDTL NUMBER
NT REYNOLDS NUMBER

DIMENSIONS
NT HEIGHT

DIODES
NT LIGHT EMITTING DIODES

DIOXIDES
NT CARBON DIOXIDE

DIPOLE ANTENNAS
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296

DIRECT LIFT CONTROLS
Direct lift control for flight path control and gust alleviation
p0434 N78-26072

DIRECT POWER GENERATORS
NT FUEL CELLS
NT MAGNETOHYDRODYNAMIC GENERATORS
NT SOLAR CELLS

DIRECTION FINDERS (RADIO)
U RADIO DIRECTION FINDERS

DIRECTIONAL ANTENNAS
NT DIPOLE ANTENNAS
NT HELICAL ANTENNAS
NT PARABOLIC ANTENNAS
NT RADAR ANTENNAS
NT STEERABLE ANTENNAS
NT YAGI ANTENNAS
Null steering antennas in the tactical scenario
p0226 A78-27037
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897

DIRECTIONAL CONTROL
NT THRUST VECTOR CONTROL

Active reference null steering for spread spectrum signals
p0226 A78-27038
Flying qualities of an aircraft with strong lateral-directional coupling --- application to space shuttle stability control
[AIAA 78-1361] p0484 A78-46550
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways, appendixes
[NASA-CR-145281] p0200 N78-16066
Aircraft attitude measurement using a vector magnetometer
[NASA-CR-155565] p0207 N78-17050
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118

DIRECTIONAL STABILITY
Evolution of a cost-effective, task-oriented, lateral-directional SAS for the A-10 aircraft --- Stability Augmentation System
[AIAA PAPER 78-1460] p0512 A78-47910

DIRIGIBLES
U AIRSHIPS

DISCHARGE COEFFICIENT
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090

DISCHARGE TUBES
U GAS DISCHARGE TUBES

DISCONNECT DEVICES
Space shuttle separation mechanisms
[NASA-TM-58210] p0613 N78-32177

DISCONNECTORS
U DISCONNECT DEVICES

DISCONTINUITY
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
Calculation of supersonic flows past wings with allowance for trailing tangential discontinuities within the framework of a model employing a system of Euler equations
p0274 A78-28958

DISCRETE ADDRESS BEACON SYSTEM
Avionics for the discrete address beacon system /DABS/
[AIAA 77-1511] p0007 A78-12256
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
DABS coverage
[AD-A045940] p0139 N78-14022
Development of a Discrete Address Beacon System
[AD-A046580] p0139 N78-14029
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
Development of a discrete address beacon system --- testing monopulse beacon antennas
[AD-A048247] p0206 N78-17036
Uplink coverage measurements in the Los Angeles area for passive BCAS --- collision avoidance
[AD-A048288] p0239 N78-18027
A hardware implementation of the ATCRBS reply processor used in DABS
[AD-A047622/6] p0257 N78-19090
The impact of a proposed active BCAS on ATCRBS performance in the Washington, D. C., 1981 environment
[AD-A048589/6] p0303 N78-20099
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
Impact of FAA E and D elements: Eight airport summary
[AD-A054245] p0489 N78-28077

DISCRETE FUNCTIONS
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
Discrete Address Beacon System (DABS) Development Test and Evaluation (DT and E) program
[AD-A052363] p0439 N78-26123
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041

DISCRIMINATION
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070

DISKS (SHAPES)
NT ROTATING DISKS

DISPENSERS
Smart dispensing with the AN/ALE-39 and derivative dispenser systems --- computer controlled ejection of chaff, flares and squibs
p0054 A78-14937

DISPERSING
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048

DISPERSIONS
NT AEROSOLS
NT FOG
NT LIQUID-GAS MIXTURES
NT SMOKE

DISPLACEMENT
Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670

DISPLACEMENT MEASUREMENT
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
Measurement of vibratory displacements of a rotating blade
p0524 A78-49397
French procedures for airfield pavement load evaluation
p0526 A78-49679

DISPLAY DEVICES
NT ANEMOMETERS
NT APPROACH INDICATORS
NT HEAD-UP DISPLAYS
NT HOT-FILM ANEMOMETERS
NT HOT-WIRE ANEMOMETERS
NT POSITION INDICATORS
NT RADARSCOPES
NT RADIO DIRECTION FINDERS
NT SPEED INDICATORS
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
Reversing the trend of cockpit complexity with smart displays --- for helicopters
p0059 A78-15381
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
Air Force electronically generated symbology standardization
p0067 A78-15670
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672
Real-time digitally driven graphic-display systems in aircraft simulations
p0069 A78-15707
Cockpit 2000 --- aircraft control and display device innovations
p0078 A78-17136
Aircraft display design using analytical pilot models

p0113 A78-18068
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
Development of an on-board minicomputer system
p0124 A78-19435
OBLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
Application of light-emitting diodes /LEDs/ in aircraft analog indicators
p0176 A78-23059
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
Coming cockpit avionics
p0231 A78-28220
Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945
Applications of new visualization techniques to on-board equipment
p0343 A78-35974
The design of future cockpits for high performance fighter aircraft
p0370 A78-36446
Color displays for airborne weather radar
p0372 A78-36980
CPT update --- for airborne displays
p0374 A78-37490
P programmable display test unit
p0417 A78-40917
ATE and avionics display systems
p0417 A78-40924
General aviation flight instrument displays
p0425 A78-42514
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
COMED - The cockpit display of the future --- Combined Map and Electronic Display
p0508 A78-47268
Flight deck display trends
p0510 A78-47899
Solid-state displays for fuel management systems --- for aircraft
p0510 A78-47900
A flight qualified graphics generator --- for B-1 defense system
p0539 A78-50007
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
Circles, texture, etc. - Alternate approaches to CIG scene detail --- computer image generation for flight simulators
[AIAA 78-1578] p0579 A78-50659
COMPUTROL - A new technique in image generation --- advanced computerized visual environment simulator
[AIAA 78-1579] p0579 A78-50660
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363 --- visual display training simulator devices
[AIAA 78-1580] p0579 A78-50661
Optical simulator with a holographic component --- infinity display system
[AIAA 78-1581] p0579 A78-50671
Sanders AN/PYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
Development of a breadboard system for recording ATC displays
p0595 A78-52964
System measurement improves computer responses to the controller --- for air traffic control
p0596 A78-52974
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
What's new in controller displays - Electronic flight strips and a color plan view display
p0597 A78-52979
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
Simultaneous sensor-presentation techniques study --- for attack aircraft
[AD-A043355] p0024 N78-10066
Proceedings of the 1977 Image Conference --- simulating visual perception for flight simulators
[AD-A044582] p0090 N78-12109
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
A current weather information display system for use at airports
p0213 N78-17600
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062
Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] p0246 N78-18083
Development of a programmable panel
[AD-A048469] p0258 N78-19098
Pilot centered requirements in control/display design
p0259 N78-19110
Display and speech devices for simulator instructor/operator station applications
[AD-A049247] p0266 N78-19169
Cockpit displayed traffic information study, part 2
[NASA-CR-156115] p0304 N78-20102
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
Wide-angle, multiviewer infinity display design
[AD-A051158] p0364 N78-23108
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109
Recent flight test results using an electronic display format on the NASA B-737
p0432 N78-26063
A review of the literature on electro-optical flight displays
[AD-A053310] p0440 N78-26141
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073
Display systems and cockpit design
p0550 N78-30116
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
Dulles control tower console design study
[AD-A056200] p0566 N78-31132
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
Human factors engineering for head-up displays: A review of military specifications and

recommendations for research
[AD-A056944] p0627 N78-33099
Development of a symbology exerciser for display generation and analysis on the visually-coupled airborne systems simulator (VCASS)
[AD-A055464] p0630 N78-33124
DISPLAY SYSTEMS
U DISPLAY DEVICES
DISSIPATION
NT ENERGY DISSIPATION
DISSYMMETRY
U ASYMMETRY
DISTANCE
NT OPTICAL SLANT RANGE
NT RADAR RANGE
NT RANGE AND RANGE RATE TRACKING
DISTANCE MEASURING EQUIPMENT
NT ALTIMETERS
NT LASER RANGE FINDERS
NT RANGE FINDERS
GDM/GPS receiver hardware implementation
p0062 A78-15589
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
Inertially aided scanning DME for area navigation
p0110 A78-17899
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
Calculating VOR/DME holding procedures --- for aircraft approach
p0114 A78-18503
Precision DME for new landing system - Fast or slow pulse
p0225 A78-26549
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
New model VOR/DME
p0373 A78-37246
The distance measurement procedure DME. I --- for air navigation
p0469 A78-44198
Investigation of the accuracy of one-way range measurements --- for radio navigation systems
p0476 A78-45158
Twoway - A position and orientation measurement system --- helicopter/VTOL landing aid application
p0525 A78-49661
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators --- wind shear
[AD-A049277] p0257 N78-19089
Design of a collision avoidance system model with statistical interrogation --- separation and collision avoidance by nonsynchronous techniques (SECANT)
p0304 N78-20107
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
A design of trajectory estimator using multiple DME range measurements
[AD-A055191] p0560 N78-31077
DISTANCE PERCEPTION
U SPACE PERCEPTION
DISTORTION
NT FLOW DISTORTION
NT SURFACE DISTORTION
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
DISTRIBUTED PARAMETER SYSTEMS
Optimal control synthesis in distributed systems with incomplete information --- noting aircraft applications
p0518 A78-48215
DISTRIBUTION (PROPERTY)
NT ANTENNA RADIATION PATTERNS
NT CHARGE DISTRIBUTION
NT DIFFRACTION PATTERNS
NT FLOW DISTRIBUTION
NT FORCE DISTRIBUTION
NT FREQUENCY DISTRIBUTION
NT HOLE DISTRIBUTION (MECHANICS)
NT INTERFERENCE LIFT
NT LOAD DISTRIBUTION (FORCES)
NT MOMENT DISTRIBUTION
NT PRESSURE DISTRIBUTION
NT RADIATION DISTRIBUTION
NT SPECTRAL ENERGY DISTRIBUTION
NT STRESS CONCENTRATION
NT TEMPERATURE DISTRIBUTION
NT VELOCITY DISTRIBUTION
NT VERTICAL DISTRIBUTION
DISTRIBUTION FUNCTIONS
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
DISTURBANCE THEORY
U PERTURBATION THEORY
DITCHING (LANDING)
The principles of underwater escape from aircraft
[AGARD-AG-230] p0094 N78-13032
DO-28 AIRCRAFT
Open loop gust alleviation --- exemplified for DO-28 aircraft
[BMFT-FB-W-77-22] p0353 N78-22114
DOCUMENTS
NT ABSTRACTS
NT BIBLIOGRAPHIES
NT HANDBOOKS
NT MANUALS
NT USER MANUALS (COMPUTER PROGRAMS)
DOMES (STRUCTURAL FORMS)
NT RADOMES
DOORS
The aerodynamic performance of a freely hinged door between two flows --- for supersonic transport propulsion nozzles
p0586 A78-51464
DOPING (ADDITIVES)
U ADDITIVES
DOPPLER EFFECT
Doppler MLS - The UK solution
p0280 A78-29934
DOPPLER NAVIGATION
The ITC PHOTNAV system --- for cadastral aerial survey photography operations
p0074 A78-16536
The victory of the frequency-reference beam over the Doppler MLS at AWOP 6 --- MLS for all-weather conditions
p0115 A78-18664
Microwave landing systems --- time reference scanning beam used to determine aircraft approach
p0275 A78-29221
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
The use of Doppler-shift position lines in satellite navigation systems
p0590 A78-51890
DOPPLER RADAR
Evaluation of airborne radar Doppler processors
p0374 A78-37477
DORNIER AIRCRAFT
NT DO-28 AIRCRAFT
Dornier LSK - Light combat aircraft with hover capability for anti-tank missions and shipboard deployment
p0336 A78-34822
DORNIER DO-28 AIRCRAFT
U DO-28 AIRCRAFT
DOSAGE
NT RADIATION DOSAGE
DOUGHNUT SHAPE WHEELS
U TOROIDAL WHEELS
DOUGLAS AIRCRAFT
NT A-4 AIRCRAFT

NT C-9 AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
Douglas Aircraft Company laser tracker
p0124 A78-19436
TRSB microwave landing system demonstration program at Cape May, New Jersey, USA
[AD-A054605] p0488 N78-28070
DOUGLAS DC-8 AIRCRAFT
U DC 8 AIRCRAFT
DOUGLAS DC-9 AIRCRAFT
U DC 9 AIRCRAFT
DOUGLAS MILITARY AIRCRAFT
U DOUGLAS AIRCRAFT
U MILITARY AIRCRAFT
DOVAP
U DOPPLER EFFECT
DOWNWASH
An approximate method of calculating downwash behind a straight wing with unsteady aperiodic motion at subsonic flight speeds
[AD-A044293] p0084 N78-12069
DRAG
NT AERODYNAMIC DRAG
NT FRICTION DRAG
NT INTERFERENCE DRAG
NT MINIMUM DRAG
NT PRESSURE DRAG
NT SUPERSONIC DRAG
NT VISCOUS DRAG
NT WAVE DRAG
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Numerical study on the stability dependence of geostrophic drag and cross-isobar angle
p0580 A78-50691
Transonic wind tunnel tests on two-dimensional aerofoil sections. Determination of pressure distribution and drag for an aerofoil with a modified NACA 65 sub2-215 section in FFA wind tunnel S5, part 2
[FFA-TN-AU-725] p0313 N78-21062
YF-17 full scale minimum drag prediction
p0436 N78-26091
The lifting wing with minimum drag in supersonic flow
[VTH-LR-234] p0488 N78-28065
DRAG BALANCE
U AERODYNAMIC BALANCE
U LIFT DRAG RATIO
DRAG COEFFICIENT
U AERODYNAMIC COEFFICIENTS
U AERODYNAMIC DRAG
DRAG DEVICES
NT AERODYNAMIC BRAKES
NT LEADING EDGE SLATS
NT SPOILERS
NT TRAILING-EDGE FLAPS
NT WING FLAPS
DRAG EFFECT
U DRAG
DRAG MEASUREMENT
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
Drag measurement in transonic wind tunnels
p0435 N78-26080
DRAG REDUCTION
Turbulent airfoils for general aviation
p0188 A78-24364
Wing with fork tips as means of increasing cost effectiveness of transport aircraft
[DGLR PAPER 77-017] p0189 A78-24410
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Ideal tail load for minimum aircraft drag
p0231 A78-28149
Supersonic transports --- drag minimization techniques
p0286 A78-31152
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
Minimum drag surfaces --- for traveling projectiles
p0342 A78-35787
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
Minimum trimmed drag and optimum c.g. position --- center of gravity
p0473 A78-44831
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
Theoretical aspects of dromedaryfoil
[AD-A047150] p0194 N78-16023
Drag reduction for gliders
[NASA-TM-75293] p0396 N78-24116
Experimental results of winglets on first, second, and third generation jet transports --- to reduce drag coefficient
p0496 N78-29048
An investigation of drag reduction for tractor trailer vehicles
[NASA-CR-144877] p0633 N78-33444
DRAGULATORS
U BRAKES (FOR ARRESTING MOTION)
DROGUES
U TOWED BODIES
DRONE AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
NT TARGET DRONE AIRCRAFT
Twenty year evolution of the WR2/WR24 series of small turbojet engines
[SAE PAPER 770998] p0181 A78-23833
DRONE HELICOPTERS
U DRONE AIRCRAFT
U HELICOPTERS
DRONE VEHICLES
NT DRONE AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
NT TARGET DRONE AIRCRAFT
A subsonic ramjet engine for expendable drones
[AIAA PAPER 78-962] p0463 A78-43522
DROP SIZE
Effect of airstream velocity on mean drop diameters of water sprays produced by pressure and air atomizing nozzles --- for combustion studies
p0329 A78-33111
DROP TESTS
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
DROP WEIGHT TESTS
U DROP TESTS
DRYING
NT DEHYDRATION
DTMB-111 GROUND EFFECT MACHINE
U GROUND EFFECT MACHINES
DTMB-430 GROUND EFFECT MACHINE
U GROUND EFFECT MACHINES
DUAL THRUST NOZZLES
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142
DUCTED BODIES
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
DUCTED FAN ENGINES
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
The aircraft ducted fan
p0286 A78-31153
DUCTED FANS
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288

Duct effects on the dynamic fan characteristics of air cushion systems
[UTIAS-TN-211] p0081 N78-12030
DUCTED FLOW
Sound separation probes for flowing duct noise measurements --- jet engine diagnostics
p0106 A78-17396
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
DUCTS
NT ACOUSTIC DUCTS
NT AIR DUCTS
Automated channel and trough-shaped surface design system algorithm --- for aircraft
p0049 A78-13174
DUNGEYS WIND SHEAR MECHANISM
U WIND SHEAR
DURABILITY
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
DYE LASERS
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
DYNAMIC CHARACTERISTICS
NT AERODYNAMIC DRAG
NT AERODYNAMIC STABILITY
NT AIRCRAFT STABILITY
NT ATTITUDE STABILITY
NT BOUNDARY LAYER STABILITY
NT COMBUSTION STABILITY
NT CONTROL STABILITY
NT DIRECTIONAL STABILITY
NT DRAG
NT DYNAMIC STABILITY
NT FLAME STABILITY
NT FLOW CHARACTERISTICS
NT FLOW DISTRIBUTION
NT FLOW STABILITY
NT FLOW VELOCITY
NT FREQUENCY STABILITY
NT FRICTION DRAG
NT HOVERING STABILITY
NT INTERFERENCE DRAG
NT INTERFERENCE LIFT
NT JET LIFT
NT LATERAL STABILITY
NT LIFT
NT LONGITUDINAL STABILITY
NT LOW SPEED STABILITY
NT MAGNETOHYDRODYNAMIC STABILITY
NT MINIMUM DRAG
NT MOTION STABILITY
NT PRESSURE DRAG
NT ROTARY STABILITY
NT ROTOR LIFT
NT SUPERSONIC DRAG
NT TRANSIENT RESPONSE
NT VISCOUS DRAG
NT WAVE DRAG
NT ZERO LIFT
Dynamics of a string accelerometer
p0131 A78-20256
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
Dynamic analysis of electrical systems
p0535 A78-49934
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
DSTR/501-M62B dynamic interface critical speed problem
[AD-A042441] p0042 N78-11108
Duct effects on the dynamic fan characteristics of air cushion systems
[UTIAS-TN-211] p0081 N78-12030
High frequency dynamic engine simulation --- TF-30 engine
[NASA-CR-135313] p0097 N78-13059
Determination of dynamic characteristics from flight test data
[DLR-FB-77-26] p0141 N78-14044
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
Determination of dynamic characteristics from flight test data
[ESA-TT-434] p0246 N78-18081
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics
[NASA-TM-78471] p0253 N78-19056
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
Airplane stability calculations with a card programmable pocket calculator
[NASA-TM-78678] p0552 N78-30138
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111
Dynamic analysis of flexible rotor-bearing systems using a model approach
p0616 N78-32424
DYNAMIC CONTROL
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
Observability criteria for nonlinear dynamic systems subjected to multiparameter measurements --- noting air navigation applicability
p0274 A78-29089
Basic problem of control of the motion of a non-Newtonian fluid in a gap --- roll forming of aircraft plastics
p0292 A78-32257
An integrated system of control for hovercraft using differentially acting 'elevons'
p0333 A78-34012
Some nonlinear effects in stability and control of wing-in-ground effect vehicles
p0474 A78-44836
DYNAMIC LOADS
NT AERODYNAMIC LOADS
NT BLAST LOADS
NT CYCLIC LOADS
NT GUST LOADS
NT LANDING LOADS
NT ROLLING CONTACT LOADS
NT SHOCK LOADS
NT VIBRATORY LOADS
NT WING LOADING
Airfield pavement load evaluation - An international overview
p0525 A78-49676
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
DYNAMIC MODELS
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
Photochemistry and dynamics of the ozone layer
p0381 A78-38766

General aviation dynamics --- aircraft activity forecasting by computerized simulation
p0428 A78-43041
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Optimal flight control synthesis via pilot modeling
[AIAA 78-1286] p0541 A78-50193
Simple numerical model for calculation of entry vehicle trim response
p0585 A78-51284
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
Wind shear modeling for aircraft hazard definition
[NASA-CR-155223] p0034 N78-11022
Unsteady hovering wake parameters identified from dynamic model tests
p0203 N78-16992
Approximate dynamic model of a turbojet engine
[NASA-TM-75263] p0264 N78-19159
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
Blade row dynamic digital compression program Volume 2: J85 circumferential distortion redistribution model, effect of Stator characteristics, and stage characteristics sensitivity study
[NASA-CR-134953] p0627 N78-33103
DYNAMIC PROGRAMMING
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
Methodology for determining, isolating, and correcting runway roughness --- using aircraft dynamic response
[AD-A044328/3] p0099 N78-13078
Optimal missile evasion
[AD-A053267] p0439 N78-26135
DYNAMIC PROPERTIES
U DYNAMIC CHARACTERISTICS
DYNAMIC RESPONSE
NT TRANSIENT RESPONSE
Helicopter response in gusty winds about a building
p0055 A78-14954
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
Model study of dynamic response of landing mat
p0117 A78-18755
A synthesis of the effects of noise on structures --- aircraft structural fatigue
p0121 A78-19078
The endangerment of flight safety due to wind shear
[DGLR PAPER 77-033] p0191 A78-24448
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
A computer-based system for processing dynamic data --- from aircraft gas turbine engine strain measurements
p0372 A78-37108
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
Methodology for determining, isolating, and correcting runway roughness --- using aircraft dynamic response
[AD-A044328/3] p0099 N78-13078
An exposition on aircraft response to atmospheric turbulence using power spectral density analysis techniques
[AD-A046108] p0143 N78-14057
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
An analytical and experimental study of the dynamic response of a semi-monocoque aircraft wing structure
p0348 N78-22072
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Airframe response to separated flow
p0438 N78-26116
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
Prediction of the severity of buffeting --- structural response to the aerodynamic excitation produced by separated flow
p0493 N78-28404
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111
Experimental investigation of gust response of hingeless helicopter rotors
[AD-A054752] p0552 N78-30142
Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control --- Lewis 10 by 10 ft supersonic wind tunnel tests
p0605 N78-32062
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
DYNAMIC STABILITY
NT AERODYNAMIC STABILITY
NT AIRCRAFT STABILITY
NT ATTITUDE STABILITY
NT BOUNDARY LAYER STABILITY
NT COMBUSTION STABILITY
NT CONTROL STABILITY
NT DIRECTIONAL STABILITY
NT FLAME STABILITY
NT FLOW STABILITY
NT FREQUENCY STABILITY
NT HOVERING STABILITY
NT LATERAL STABILITY
NT LONGITUDINAL STABILITY
NT LOW SPEED STABILITY
NT MAGNETOHYDRODYNAMIC STABILITY
NT MOTION STABILITY
NT ROTARY STABILITY
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
Analysis of lateral dynamic stability of an airplane with deformable control systems. II - Numerical analysis
p0108 A78-17642
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
Static and dynamic stability --- aircraft longitudinal control

p0332 A78-33588
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
Determination of nonlinearities of dynamic stability --- of wind tunnel models
[ONERA, TP NO. 1978-52] p0479 A78-45280
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
Subsonic dynamic stability characteristics of two close-coupled canard-wing configurations
[NASA-TP-1291] p0622 N78-33050

DYNAMIC STRUCTURAL ANALYSIS
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures --- aircraft structural analysis
p0127 A78-19656
Continuation and direct solution of the flutter equation
p0221 A78-25703
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
Dynamic stability of a two blade rotor
[ONERA, TP NO. 1978-32] p0291 A78-32037
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
A computer-based system for processing dynamic data --- from aircraft gas turbine engine strain measurements
p0372 A78-37108
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146
Density of motions in the flutter of infinite plates
p0594 A78-52932
Structural analysis of ultra-high speed aircraft structural components
[NASA-CR-155334] p0101 N78-13476
Significance of structural nonlinearities from the structural dynamics and aeroelasticity point of view
p0204 N78-17005
Analysis and synthesis of operational loads --- aircraft structures
[ISD-193] p0310 N78-20551
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145
Pressure inside a room subjected to sonic boom
[UTIAS-TN-207] p0345 N78-22029
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
Heavy lift helicopter - advanced technology component program - rotor blade
[AD-A053423] p0499 N78-29089
Structural dynamics, stability, and control of helicopters
[NASA-CR-158909] p0552 N78-30139
Dynamic analysis using superelements for a large helicopter model
p0617 N78-32486

DYNAMIC TESTS
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
Determination of dynamic characteristics from flight test data
[DLR-FB-77-26] p0141 N78-14044
Determination of dynamic characteristics from flight test data
[ESA-TT-434] p0246 N78-18081
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057

DYNAMOS
U ROTATING GENERATORS

E

E-3A AIRCRAFT
An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948
Early warning aircraft
p0342 A78-35898

E-4A AIRCRAFT
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047

EARLY WARNING SYSTEMS
Early warning aircraft
p0342 A78-35898
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports
p0428 A78-43053

EARTH ATMOSPHERE
NT MESOSPHERE
NT OZONOSPHERE
NT TROPOSPHERE
NT UPPER ATMOSPHERE

EARTH MOVEMENTS
NT EARTHQUAKES

EARTH ORBITING SPACE STATIONS
U EOSS

EARTH ORBITS
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578

EARTH RESOURCES
NT CRUDE OIL
NT FOSSIL FUELS

EARTH RESOURCES SURVEY AIRCRAFT
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189

EARTH SATELLITES
NT AEROSAT SATELLITES
NT ATS 5
NT ATS 6
NT COMMUNICATION SATELLITES
NT EOSS
NT GEODETIC SATELLITES
NT GEOS SATELLITES (ESA)
NT MARITIME SATELLITES
NT MAROTS (ESA)
NT METEOROLOGICAL SATELLITES
NT NAVIGATION SATELLITES
NT NAVSTAR SATELLITES
NT TRANSIT SATELLITES

EARTHQUAKES
Aeronautical knowledge, selected articles
[AD-A051710] p0367 N78-23986

EBF
U EXTERNALLY BLOWN FLAPS

ECHOES
NT CLUTTER
NT RADAR ECHOES

ECOLOGICAL SYSTEMS
U ECOLOGY

ECOLOGY
Brief ecological survey of airports and the bird hazard problem
p0115 A78-18666
Baseline data requirements for assessing environmental impact

[PR-281148/7] p0617 N78-32620
ECONOMIC ANALYSIS
The domestic airline industry --- Book
p0003 A78-11951
Mathematical planning and bulk service methods of civil aviation --- Russian book
p0015 A78-13000
A-7 ALOFT demonstration and economic analysis --- fiber optics interface for navigation and weapons delivery
p0054 A78-14939
The next commercial jet transport: The need, economics, technology, and financing; Air Transportation Research International Forum, San Francisco, Calif., May 9, 1977, Papers
p0057 A78-15084
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
Methodology for optimizing an air fleet
p0116 A78-18668
Planning for the next generation aircraft - An airline view
[AIAA PAPER 78-361] p0186 A78-24033
Comments on 'Feasibility study of a hybrid airship operating in ground effect'
p0188 A78-24367
Future development of commercial aircraft· Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
Recent progress and technical and economic outlooks in the processing of materials for airframe elements
p0221 A78-26036
Assessment of processing methods for titanium alloys for aircraft structures
p0221 A78-26040
Monitoring airline performance
p0332 A78-33587
An economic and technical perspective of the turboprop engine in Ag-aviation
p0375 A78-37536
General aviation dynamics --- aircraft activity forecasting by computerized simulation
p0428 A78-43041
An integrated analysis of the fundamental problems of air transport
p0525 A78-49447
'Supermarket' airplanes --- aircraft replacement cycle in major airlines
[AIAA PAPER 78-1533] p0527 A78-49769
Operations and economics of U.S. air transportation
[AIAA PAPER 78-1545] p0528 A78-49770
European air transport up to the year 2000 /Lord Douglas of Kirtleside Lecture/
p0587 A78-51520
Technical-economic analysis of the direct operating costs of air transport companies --- German thesis
p0589 A78-51752
The changing environment of international air commerce
p0592 A78-52448
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
ECONOMIC FACTORS
The next generation of commercial aircraft - International perspective
p0057 A78-15087
Airport planning and economics - Some changing perspectives
[SAE PAPER 770581] p0060 A78-15386
Airport aircraft economic interface
[SAE PAPER 770580] p0060 A78-15387
Prospects for a new generation air transport
[AIAA PAPER 78-363] p0186 A78-24035
Economic and safety aspects of prolonging engine life
p0217 A78-25142
Aviation futures to the year 2000
p0595 A78-52966
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
The economic implications of NDE: Opportunities and payoff
p0443 N78-26463
ECONOMIC IMPACT
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
The policy problems and economics of aircraft noise
p0122 A78-19128
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
A study of the economic impact of selected communications alternatives, present system definition
[AD-A052162] p0365 N78-23285
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
ECONOMICS
NT DEMAND (ECONOMICS)
And now 'the deregulators' - When will they learn
p0582 A78-51127
EDDIES
U VORTICES
EDDY CURRENTS
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
EDDY VISCOSITY
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
EDGES
NT BLUNT LEADING EDGES
NT LEADING EDGES
NT SHARP LEADING EDGES
NT TRAILING EDGES
EDUCATION
NT FLIGHT TRAINING
NT GUNNERY TRAINING
NT PILOT TRAINING
Teaching design at all levels --- in aerospace engineering curricula
[AIAA PAPER 78-1455] p0511 A78-47906
A computerized undergraduate aircraft design course
[AIAA PAPER 78-1492] p0515 A78-47933
The value of aerospace design synthesis courses as viewed by aerospace professionals
[AIAA PAPER 78-1493] p0515 A78-47934
EFFECTIVE PERCEIVED NOISE LEVELS
Calculations of maximum A-weighted sound levels dBA --- single aircraft noise levels in airport vicinities
p0460 N78-27872
A subjective field study of helicopter blade-slap noise
[NASA-TM-78758] p0494 N78-28680
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673
Annoyance due to the interaction of community noise sources
p0634 N78-33613
EFFECTIVENESS
NT COST EFFECTIVENESS
NT SYSTEM EFFECTIVENESS
EFFECTORS
U CONTROL EQUIPMENT
EFFICIENCY
NT COMBUSTION EFFICIENCY
NT COMPRESSOR EFFICIENCY
NT ENERGY CONVERSION EFFICIENCY
NT NOZZLE EFFICIENCY
NT POWER EFFICIENCY
NT PROPELLER EFFICIENCY

NT PROPULSIVE EFFICIENCY
NT THERMODYNAMIC EFFICIENCY
NT TRANSMISSION EFFICIENCY
EIGENFUNCTIONS
U EIGENVECTORS
EIGENSTATES
U EIGENVECTORS
EIGENVALUES
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
Eigenvalue/eigenvector assignment using output feedback
[NASA-TP-1118] p0251 N78-18823
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
EIGENVECTORS
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
Eigenvalue/eigenvector assignment using output feedback
[NASA-TP-1118] p0251 N78-18823
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
EJECTION
A study of the desirability and feasibility of in-flight escape from Army helicopters
[AD-A051153] p0359 N78-23071
EJECTION SEATS
Downed Airman Power Source (DAPS) for inclusion into the BSSK-8A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044483] p0083 N78-12052
Downed Airman Power Source (DAPS) for inclusion into the BSSK-1A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044481] p0083 N78-12053
Ejection under deceleration
[AD-A046117] p0138 N78-14018
EJECTORS
The prediction of the performance of low pressure-ratio thrust-augmenter ejectors
[AIAA PAPER 78-145] p0159 A78-20704
Computation of the base pressure in ejector nozzles of different length with zero coefficient of ejection
p0168 A78-21098
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
EKMAN LAYER
U BOUNDARY LAYER TRANSITION
ELASTIC BENDING
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
ELASTIC BODIES
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
Assessment of dynamic coordinate alignment for elastic aircraft --- flight control Kalman filter estimates
p0538 A78-49987
ELASTIC CONSTANTS
U ELASTIC PROPERTIES
ELASTIC DAMPING
NT VISCOELASTIC DAMPING
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
Natural vibrations of a rigid rotor mounted on elastic ball bearings
p0582 A78-51015
ELASTIC DEFORMATION
NT ELASTIC BENDING
Elastic deformations of rapidly-rotating prismatic mirrors
p0168 A78-21374
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
Analysis of permanent deformations of flexible airport pavements
[AD-A044269/9] p0099 N78-13079
Outline of aeroelastic phenomena
p0204 N78-17003
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
ELASTIC MODULUS
U MODULUS OF ELASTICITY
ELASTIC PLATES
Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
ELASTIC PROPERTIES
NT AEROELASTICITY
NT AEROTHERMOELASTICITY
NT ELASTOPLASTICITY
NT MODULUS OF ELASTICITY
NT VISCOELASTICITY
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618
ELASTIC SHELLS
Forced vibration of thin elastic shells with application to fractional horsepower hermetic refrigeration compressor shells
p0616 N78-32457
ELASTIC STABILITY
U DAMPING
ELASTIC WAVES
NT AERODYNAMIC NOISE
NT AIRCRAFT NOISE
NT COMPRESSION WAVES
NT ENGINE NOISE
NT JET AIRCRAFT NOISE
NT MACH CONES
NT NOISE (SOUND)
NT NORMAL SHOCK WAVES
NT OBLIQUE SHOCK WAVES
NT SHOCK WAVES
NT SONIC BOOMS
NT SOUND WAVES
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
Influence of rarefaction and compression waves on base pressure
p0600 A78-53781
ELASTICITY
U ELASTIC PROPERTIES
ELASTODYNAMICS
NT ELASTIC DAMPING
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures --- aircraft structural analysis
p0127 A78-19656
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
ELASTOMERS
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
ELASTOPLASTICITY
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials

p0169 A78-21971
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints --- in aircraft structures
[DLR-FB-77-63] p0567 N78-31251
ELECTRIC APPLIANCES
U ELECTRIC EQUIPMENT
ELECTRIC BATTERIES
NT NICKEL CADMIUM BATTERIES
NT STORAGE BATTERIES
ELECTRIC CHARGE
NT ELECTROSTATIC CHARGE
NT TRAVELING CHARGE
ELECTRIC CONNECTORS
Preferred electrical connectors for aerospace vehicles and associated equipment
[SAE ARP 1308A] p0471 A78-44688
ELECTRIC CONTACTS
Turbine engine slip ring technology - A survey --- for aircraft
[SAE PAPER 770976] p0179 A78-23820
ELECTRIC CONTROL
Electric flight control systems - Applicable now
p0067 A78-15688
A camera system for small format aerial photography
p0337 A78-34873
ELECTRIC CURRENT
NT EDDY CURRENTS
NT ELECTRIC DISCHARGES
NT GAS DISCHARGES
NT LIGHTNING
EMP induced currents on a simplified missile theory and experiment
p0385 A78-39109
Voltages and currents induced by lightning
p0035 N78-11032
Voltages and currents induced on wiring
p0036 N78-11036
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345
B-1 EMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092
ELECTRIC DISCHARGES
NT GAS DISCHARGES
NT LIGHTNING
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349
ELECTRIC EQUIPMENT
Aircraft electrical equipment --- Russian book
p0192 A78-24475
Computer aided design of aircraft electrical systems
p0479 A78-45410
Electrical systems (vehicles and weapon subsystems)
[AD-A045343] p0090 N78-12335
ELECTRIC EQUIPMENT TESTS
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
Aircraft electrical system testing and data reduction using digital techniques
p0535 A78-49937
ELECTRIC FIELDS
NT EXTERNAL SURFACE CURRENTS
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798
Aircraft response effect on B-field measurements
[AD-A047986] p0248 N78-18272
ELECTRIC FILTERS
NT DIGITAL FILTERS
NT RADIO FILTERS
NT TRACKING FILTERS
ELECTRIC GENERATORS
NT AC GENERATORS
NT FUEL CELLS
NT MAGNETOHYDRODYNAMIC GENERATORS
NT ROTATING GENERATORS
NT SOLAR CELLS
NT SOLAR GENERATORS
NT TURBOGENERATORS
Electrical load management for advanced aircraft electrical systems
p0062 A78-15575
Variable speed constant frequency /VSCF/ aircraft electrical power
[SAE PAPER 771002] p0181 A78-23836
ELECTRIC IMPULSES
U ELECTRIC PULSES
ELECTRIC MOTORS
NT ASYNCHRONOUS MOTORS
NT INDUCTION MOTORS
NT SYNCHRONOUS MOTORS
Primary flight control actuation with electric motors
p0067 A78-15689
Description of transient motion of aviation mechanisms with double-winding electromagnetic clutches
p0220 A78-25584
ELECTRIC POTENTIAL
Neutralization problem for a Space Shuttle
p0507 A78-47124
Voltages and currents induced by lightning
p0035 N78-11032
Voltages and currents induced on wiring
p0036 N78-11036
Examples of induced voltages measured on aircraft
p0036 N78-11038
ELECTRIC POWER CONVERSION
U ELECTRIC GENERATORS
ELECTRIC POWER SUPPLIES
185 W/kg solar array for naval sea control systems
p0002 A78-10964
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Overview of the advanced aircraft electrical system /AAES/ A-7E prototype design
p0061 A78-15573
Electrical load management for advanced aircraft electrical systems
p0062 A78-15575
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
Constant speed generating systems --- for aircraft electric power supply
[SAE PAPER 771001] p0181 A78-23835
Electronic converter electric power supply /ECEPS/ - KC-135
[SAE PAPER 771003] p0181 A78-23837
Pneumatic ground power supplies for starting aircraft
[SAE AIR 944A] p0472 A78-44693
Dynamic analysis of electrical systems
p0535 A78-49934
Application of rare earth/transition metal permanent magnets to 400 Hz aircraft systems - An AF overview
p0535 A78-49935
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
Modeling refinements for the rectified superconducting alternator --- airborne power supply
p0536 A78-49961
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552
Standard modular power supplies for avionics
[AD-A057159] p0627 N78-33100
ELECTRIC PULSES
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
ELECTRIC WELDING
NT ELECTRON BEAM WELDING
NT GAS TUNGSTEN ARC WELDING
NT PLASMA ARC WELDING
ELECTRIC WIRE
Fabrication and assembly of cable strands for aircraft engines --- Russian book
p0599 A78-53432
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
ELECTRIC WIRING
U ELECTRIC WIRE
U WIRING

ELECTRICAL CONDUCTIVITY
U ELECTRICAL RESISTIVITY
ELECTRICAL FAULTS
NT SHORT CIRCUITS
ELECTRICAL IMPEDANCE
EMP response of aircraft antennas
p0169 A78-21992
ELECTRICAL INSULATION
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
ELECTRICAL PROPERTIES
NT CAPACITANCE
NT CHARGE DISTRIBUTION
NT DIELECTRIC PROPERTIES
NT ELECTRICAL IMPEDANCE
NT ELECTRICAL RESISTIVITY
ELECTRICAL RESISTIVITY
Interaction of thick film dielectric, conductor, and alumina substrate for DCU201 aircraft controller
[SAND-78-0069] p0493 N78-28349
ELECTRICITY
NT ATMOSPHERIC ELECTRICITY
NT STATIC ELECTRICITY
ELECTRO-OPTICS
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
Non-extractive electro-optical measurement of jet-engine emissions
[AD-A056783] p0628 N78-33105
ELECTROACOUSTIC TRANSDUCERS
NT MICROPHONES
ELECTROCHEMICAL CELLS
NT FUEL CELLS
NT NICKEL CADMIUM BATTERIES
NT STORAGE BATTERIES
ELECTROCHEMICAL MACHINING
Compressor blade manufacture by electrochemical machining. Advanced turbine engine gas generator
[AD-A043742] p0030 N78-10110
ELECTRODEPOSITION
NT ELECTROPLATING
ELECTRODYNAMICS
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
ELECTROFORMING
Large electroformed nickel moulds for aircraft parts
p0508 A78-47267
ELECTROGENERATORS
U ELECTRIC GENERATORS
ELECTROHYDRAULIC CONTROL
U ELECTRIC CONTROL
U HYDRAULIC CONTROL
ELECTROKINETICS
Comparison tests on the 100-GPM electrokinetic fuel decontaminator and a 100-GPM military standard filter/separator
[AD-A048655] p0248 N78-18226
ELECTROLYTES
Nickel/cadmium aircraft batteries: Rapid electrolyte exchange technique
[AD-A039335] p0311 N78-20632
ELECTROLYTIC GRINDING
U ELECTROCHEMICAL MACHINING
ELECTROMAGNETIC ABSORPTION
NT INFRARED ABSORPTION
ELECTROMAGNETIC COMPATIBILITY
Current and scattering field of a long short-circuited receiving vibrator --- aircraft antenna compatibility
p0339 A78-35467
Filtering techniques in avionic transmitters
p0384 A78-39084
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
EMC control of the tornado aircraft
p0384 A78-39087
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
Electromagnetic compatibility on gas turbine engines for aircraft propulsion
[SAE AIR 1423] p0472 A78-44699
Methods of achieving electromagnetic compatibility of gas turbine engine accessories, for self-propelled vehicles
[SAE AIR 1425] p0472 A78-44700
EMC antennas and antenna factors - How to use them
[SAE AIR 1509] p0472 A78-44703
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 1: Validation and sensitivity study
[AD-A045034] p0085 N78-12077
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 2: Interpretation of the integrated margin
[AD-A045035] p0086 N78-12078
EMC analysis of the proposed AEROSAT VHF subsystem with current inband communications systems. Volume 2: Worldwide
[AD-A043904] p0090 N78-12281
Interference analysis between TRSB microwave landing system and adjacent C-band radars
[AD-A049882] p0304 N78-20101
FAA remote terminal system
[AD-A054604] p0493 N78-28295
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297
ELECTROMAGNETIC CONTROL
U ELECTROMAGNETS
U REMOTE CONTROL
ELECTROMAGNETIC DEDUCTION
U MAGNETIC INDUCTION
ELECTROMAGNETIC FIELDS
NT FAR FIELDS
NT NEAR FIELDS
EMC antennas and antenna factors - How to use them
[SAE AIR 1509] p0472 A78-44703
Effects of shields on cables
p0036 N78-11037
Aircraft response effect on E-field measurements
[AD-A047986] p0248 N78-18272
ELECTROMAGNETIC INTERACTIONS
External interaction of the nuclear EMP with aircraft and missiles
p0169 A78-21989
Surface current and charge density induced on aircraft
p0169 A78-21990
EMP response of aircraft antennas
p0169 A78-21992
Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
ELECTROMAGNETIC INTERFERENCE
NT CHIRP SIGNALS
NT ELECTROMAGNETIC NOISE
NT JAMMING
NT RADIO FREQUENCY INTERFERENCE
The determination of margins of safety for critical aircraft systems --- electromagnetic interference effects on flight and engine controls
p0384 A78-39082
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 2: Interpretation of the integrated margin
[AD-A045035] p0086 N78-12078
A-7 ALCPT economic analysis and EMI-EMP test results
p0202 N78-16816
Interference analysis between TRSB microwave landing system and adjacent C-band radars
[AD-A049882] p0304 N78-20101
ELECTROMAGNETIC MEASUREMENT
NT ELECTROMAGNETIC NOISE MEASUREMENT
ELECTROMAGNETIC NOISE
Study of magnetic noise in the Ka-26 helicopter

p0385 A78-39188
ELECTROMAGNETIC NOISE MEASUREMENT
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105
ELECTROMAGNETIC PROPERTIES
NT CAPACITANCE
NT COLOR
NT DIELECTRIC PROPERTIES
NT OPTICAL PROPERTIES
NT REFLECTANCE
ELECTROMAGNETIC PULSES
THREDP - A free-field EMP coupling and scattering code --- electromagnetic scattering from aircraft
p0126 A78-19580
External interaction of the nuclear EMP with aircraft and missiles
p0169 A78-21989
Surface current and charge density induced on aircraft
p0169 A78-21990
EMP response of aircraft antennas
p0169 A78-21992
Precision DME for new landing system - Fast or slow pulse
p0225 A78-26549
A three-dimensional finite-difference solution of the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
EMP induced currents on a simplified missile theory and experiment
p0385 A78-39109
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
ELECTROMAGNETIC RADIATION
NT CENTIMETER WAVES
NT ELECTROMAGNETIC PULSES
NT LIGHT BEAMS
NT MILLIMETER WAVES
NT POLARIZED ELECTROMAGNETIC RADIATION
NT RADIO EMISSION
NT RADIO WAVES
NT SUBMILLIMETER WAVES
NT ULTRAVIOLET RADIATION
ELECTROMAGNETIC SCATTERING
THREDE - A free-field EMP coupling and scattering code --- electromagnetic scattering from aircraft
p0126 A78-19580
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
p0248 N78-18291
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
[ESA-TT-436] p0365 N78-23391
ELECTROMAGNETIC SHIELDING
Lightning effects on aircraft
p0035 N78-11028
Effects of shields on cables
p0036 N78-11037
ELECTROMAGNETIC SPECTRA
NT INFRARED SPECTRA
NT VIBRATIONAL SPECTRA
ELECTROMAGNETIC WAVE FILTERS
NT DIGITAL FILTERS
NT INFRARED FILTERS
NT TRACKING FILTERS
ELECTROMAGNETIC WAVE TRANSMISSION
NT IONOSPHERIC PROPAGATION
NT LIGHT TRANSMISSION
NT MICROWAVE ATTENUATION
NT MICROWAVE TRANSMISSION
NT MULTIPATH TRANSMISSION
NT RADAR TRANSMISSION
NT RADIO TRANSMISSION
NT SPREAD SPECTRUM TRANSMISSION
NT TELEVISION TRANSMISSION
ELECTROMAGNETS
NT HIGH FIELD MAGNETS
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
ELECTROMECHANICAL DEVICES
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
Electromagnetic compatibility on gas turbine engines for aircraft propulsion
[SAE AIR 1423] p0472 A78-44699
Methods of achieving electromagnetic compatibility of gas turbine engine accessories, for self-propelled vehicles
[SAE AIR 1425] p0472 A78-44700
Electromechanical flight control actuator, volume 2
[NASA-CR-151734] p0413 N78-25986
Electromechanical flight control actuator, volume 3
[NASA-CR-151735] p0413 N78-25987
ELECTRON BEAM WELDING
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
Electron beam welding titanium elements of an aircraft structure
[AAAP-NT-77-44] p0355 N78-22383
ELECTRON BEAMS
Neutralization problem for a Space Shuttle
p0507 A78-47124
ELECTRON DENSITY (CONCENTRATION)
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
ELECTRON MICROSCOPY
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
ELECTRON RADIATION
NT ELECTRON BEAMS
ELECTRON TUBES
NT CATHODE RAY TUBES
NT GAS DISCHARGE TUBES
NT MICROWAVE OSCILLATORS
NT TRAVELING WAVE TUBES
ELECTRONIC CONTROL
Air Force electronically generated symbology standardization
p0067 A78-15670
Primary flight control actuation with electric motors
p0067 A78-15689
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
Integrity in flight control systems
p0182 A78-23873
YC-14 flight test program
p0233 A78-28458
Using simulation to determine the transfer function of the electronic part of a control loop --- for gas turbine aircraft engines
p0277 A78-29584
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Research and development of digital jet-engine controls
p0578 A78-50626
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
ELECTRONIC COUNTERMEASURES
Design considerations for ECM systems in attack and fighter aircraft

p0054 A78-14928
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
Smart dispensing with the AN/ALE-39 and derivative dispenser systems --- computer controlled ejection of chaff, flares and squibs
p0054 A78-14937
Airborne electronic warfare in the modern military force
[AIAA PAPER 78-324] p0185 A78-24018
Radar electronic counter-countermeasures
p0222 A78-26159
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040
The next generation EW system - ASPJ --- Airborne Self Protection Jammer
p0288 A78-31700
ASPJ - Partners at last --- Airborne Self Protection Jammers
p0336 A78-34676
Comparisons of high anti-jam design techniques for GPS receivers --- Global Positioning System
p0530 A78-49857
Multiprocessing for electronic warfare avionics
p0532 A78-49869
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078

ELECTRONIC EQUIPMENT
NT CMOS
NT ELECTRONIC MODULES
NT ELECTRONIC PACKAGING
NT SEMICONDUCTOR DEVICES
NT SOLID STATE DEVICES
NT YAG LASERS
Navigating Canada, to the end of the twentieth century
p0111 A78-17907
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959
Modern RF system design for aircraft --- tactical information exchange system
p0373 A78-37341
Electronic aircraft collision avoidance system --- Russian book
p0376 A78-37603
What's new in controller displays - Electronic flight strips and a color plan view display
p0597 A78-52979
Methodology questions involved in systems engineering for devising an optimum radio-engineering system for trajectory measurements --- of space vehicles
p0598 A78-53253
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
Design to minimize indirect effects
p0036 N78-11039
Test techniques for evaluation of indirect effects
p0036 N78-11041
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079

ELECTRONIC EQUIPMENT TESTS
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer --- Joint Tactical Information Distribution System for TDMA digital communication and navigation
[AIAA 77-1415] p0014 A78-12677
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948
Aircraft lightning vulnerability testing
p0062 A78-15585
The relationship between simulation and flight test
p0062 A78-15586
Compatibility testing and integration of DAIS multiplex bus equipments --- Digital Avionics Information System
p0064 A78-15638
Shop test success is a function of the airborne system design --- F-16 weapon avionics
p0068 A78-15699
Recent developments in automatic testing
p0108 A78-17663
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
Practical experience in vibration testing external avionics systems
p0292 A78-32134
Jaguar and Tornado avionic development testing
p0380 A78-38748
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
EMC control of the tornado aircraft
p0384 A78-39087
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
A programmable display test unit
p0417 A78-40917
ATE and avionics display systems
p0417 A78-40924
Experimental determination of a more powerful burn-in
p0481 A78-46321
LOGMOD - The fault-isolator --- for helicopter electronic systems
p0523 A78-49239
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
Test techniques for evaluation of indirect effects
p0036 N78-11041

ELECTRONIC MODULES
MSP/ITWL airborne measuring system
p0231 A78-28196
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
Modular packaging approaches
[AD-A048205] p0249 N78-18321
Stand-alone development system using a KIM-1 microcomputer module
[NASA-CR-156067] p0303 N78-20100
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120
Standard modular power supplies for avionics
[AD-A057159] p0627 N78-33100

ELECTRONIC PACKAGING
Modular packaging approaches
[AD-A048205] p0249 N78-18321

ELECTRONIC SIGNAL MEASUREMENT
U SIGNAL MEASUREMENT

ELECTRONIC SWITCHES
U SWITCHING CIRCUITS

ELECTROPHYSICS
NT ELECTRO-OPTICS

ELECTROPLATING
Problem-solving with selective plating --- for aircraft metal coating repair
p0383 A78-38900
ELECTROSEISMIC EFFECT
U ELECTRIC CURRENT
ELECTROSTATIC CHARGE
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
Electrostatic charging of JP-4 fuel on polyurethane foams
[AD-A053931] p0457 N78-27278
ELECTROSTATIC FIELDS
U ELECTRIC FIELDS
ELECTROSTATIC PROBES
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
Detecting abnormal turbine engine deterioration using electrostatic methods
[AIAA PAPER 78-1473] p0513 A78-47919
Detecting abnormal turbine engine deterioration using electrostatic methods
p0590 A78-51946
ELEMENTARY PARTICLES
NT LIGHT BEAMS
NT NEUTRON BEAMS
ELEVATION ANGLE
Interferometer design for elevation angle estimation --- radar detection in ATC
p0001 A78-10304
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles --- of ground-to-aircraft wideband data links
p0592 A78-52360
Airborne antenna coverage requirements for the TCV B-737 aircraft --- for operation with microwave landing systems
[NASA-TM-78647] p0153 N78-15325
ELEVATORS (CONTROL SURFACES)
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
Calculation of the horizontal tail loads from elevator actuation
[DLR-IB-536-76/4] p0238 N78-18011
ELEVONS
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
An integrated system of control for hovercraft using differentially acting 'elevons'
p0333 A78-34012
ELLIPSOIDS
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
ELLIPSOMETERS
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
EMERGENCIES
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
EMISSION
NT ACOUSTIC EMISSION
NT FLUORESCENCE
NT PARTICLE EMISSION
NT RADIO EMISSION
NT SHOCK WAVE LUMINESCENCE
NT X RAY FLUORESCENCE
EMISSION SPECTRA
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
EMISSOGRAPHS
U RECORDING INSTRUMENTS
ENCODING
U CODING
ENCOUNTERS
Mutual counteraction of two moving objects. I --- remote optimal encounter guidance
p0338 A78-34960
ENDFIRE ARRAYS
NT YAGI ANTENNAS
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
ENERGY CONSERVATION
Energy conservation in aeronautical ground testing
p0002 A78-11103
Energy savings - The viewpoint of an aircraft manufacturer
p0003 A78-12031
Saving raw materials or saving energy in aircraft construction
p0053 A78-14285
Helicopters and energy savings
p0056 A78-15020
Future fuels for aviation
[ONERA, TP NO. 1977-156] p0057 A78-15021
The improvement of various engine installation components in a subsonic transport aircraft
p0057 A78-15022
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034
Aviation fuel usage - Economy and conservation
p0285 A78-30698
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Aviation fuels - A supplier's perspective
p0287 A78-31308
Energy conserving aircraft from the engine viewpoint
p0287 A78-31310
Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
Air traffic control and energy conservation in air operations
p0288 A78-31314
Supersonic transport in terms of energy savings
p0342 A78-35893
CTOL concepts and technology development
p0461 A78-43358
Propulsion --- NASA program for aircraft fuel consumption reduction
p0461 A78-43360
The second generation of high-bypass turbofans - A market clouded by uncertainty
p0509 A78-47423
Turboexpanders for energy conservation
p0588 A78-51621
Alternative fuels
p0040 N78-11074
Effective fuel conservation programs could save millions of gallons of aviation fuel
[PB-271249/5] p0091 N78-12552
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
Some practical limitations to fuel-conservative civil engine technology
[AAAF-NT-77-29] p0351 N78-22092
Energy savings. An aircraft constructor's viewpoint
[AAAF-NT-77-24] p0397 N78-24127
Helicopters and energy savings
[AAAF-NT-77-25] p0397 N78-24128

Supersonic transportation faced with energy savings
[AAAF-NT-77-28] p0397 N78-24131
ACEE propulsion overview
p0446 N78-27048
Energy efficient engine: Preliminary design and integration studies
p0447 N78-27053
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
Fuel conservative aircraft engine technology
[NASA-TM-78962] p0454 N78-27127
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066

ENERGY CONSUMPTION
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229

ENERGY CONVERSION
NT SATELLITE SOLAR ENERGY CONVERSION
Electronic converter electric power supply /ECEPS/ - KC-135
[SAE PAPER 771003] p0181 A78-23837
The flapwing, a unique fluid machine element
p0418 A78-41157
10 years of contract research for the pump/compressor industrial concern
p0523 A78-49175

ENERGY CONVERSION EFFICIENCY
Advances in aircraft efficiency
p0112 A78-18022
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
Investigating the efficiency of gas turbines in off-design operation --- multistage experimental data
p0377 A78-37860
Airframes and aerodynamics --- aircraft design in NASA Energy Efficient Transport program
p0461 A78-43359
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108

ENERGY DENSITY
U FLUX DENSITY

ENERGY DISSIPATION
An analytic study of the energy dissipation of turbomachinery bladed-disk assemblies due to inter-shroud segment rubbing
[ASME PAPER 77-DET-73] p0338 A78-35231
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121

ENERGY DISTRIBUTION
NT SPECTRAL ENERGY DISTRIBUTION

ENERGY EXCHANGE
U ENERGY TRANSFER

ENERGY LOSSES
U ENERGY DISSIPATION

ENERGY METHODS
NT STRAIN ENERGY METHODS

ENERGY POLICY
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Alternative fuels
p0040 N78-11074
Effective fuel conservation programs could save millions of gallons of aviation fuel
[PB-271249/5] p0091 N78-12552
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549

ENERGY REQUIREMENTS
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
Linear machine power requirements and system comparisons --- for German magnetic levitation revenue vehicles
p0585 A78-51271

ENERGY SOURCES
Aviation futures to the year 2000
p0595 A78-52966
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552

ENERGY STORAGE
Capacitors for aircraft high power
[AD-A046340] p0151 N78-15052
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096

ENERGY STORAGE DEVICES
U ENERGY STORAGE

ENERGY TECHNOLOGY
Performance-optimized horizontal-axis wind turbines
p0170 A78-22232
Where aerospace can serve afresh - Paths to energy independence
p0177 A78-23420

ENERGY TRANSFER
Blade fragment energy analysis
p0025 N78-10074
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111

ENGINE CONTROL
NT TURBOJET ENGINE CONTROL
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
Design of multivariable PID controllers with application to a gas-turbine --- Proportional Integral Derivative
p0072 A78-16308
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
Detection of sensor failure and output reconstruction for aircraft engine controls
[AIAA PAPER 78-4] p0157 A78-20627
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Optimal controls for an advanced turbofan engine
p0183 A78-23893
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
A reliable modular automatic system adapted to avionics controls: Design through successive refinements - Production --- French book
p0281 A78-30024

Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
The determination of margins of safety for critical aircraft systems --- electromagnetic interference effects on flight and engine controls
p0384 A78-39082
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Research and development of digital jet-engine controls
p0578 A78-50626
Optimal control of aircraft powerplant --- Russian book
p0597 A78-53119
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Alternatives for jet engine control
[NASA-CR-157578] p0563 N78-31107

ENGINE COOLANTS
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
A theoretical and experimental analysis of the influence of coolant discharge from perforated turbine blades on their aerodynamic behavior
p0580 A78-50777
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
Measuring techniques in high temperature turbines
p0322 N78-21151
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157

ENGINE DESIGN
NT ROCKET ENGINE DESIGN
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
Statistical modeling of optimal GTE parameter trimming
p0049 A78-13173
The improvement of various engine installation components in a subsonic transport aircraft
p0057 A78-15022
The next engine decision - Why it takes so long --- for passenger airliners
p0058 A78-15090
Aircraft and helicopter engines - Fundamentals of design and flight operations --- Russian book
p0059 A78-15222
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
Gas-turbine-engine piping --- Russian book
p0070 A78-15941
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
The design and performance of high temperature turbines in turbofan engines
p0112 A78-18023
Aircraft engines and gas turbines --- Book
p0113 A78-18400
Review of the development of small- and medium-capacity gas turbines at the Motoren- und Turbinen Union
[DGLR PAPER 77-061] p0116 A78-18702
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
Transient speed response of a gas turbine
p0122 A78-19229
Design of long blades by method of constant circulation
p0122 A78-19230
The answer to the 'engine deficiency' question --- design cycles for gas turbine engines
p0126 A78-19546
Simplified theoretical model of combustion in the chamber of a pulsed jet engine
p0132 A78-20279
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Trends and research opportunities in airbreathing propulsion
[AIAA PAPER 78-44] p0157 A78-20652
Construction of a mathematical model of a jet engine for analyzing transient flows
p0167 A78-20971
Big fans for the airlines
p0170 A78-22269
Research needs for U.S. Army aircraft propulsion
[AIAA PAPER 78-45] p0171 A78-22558
Twenty year evolution of the WR2/WR24 series of small turbojet engines
[SAE PAPER 770998] p0181 A78-23833
Preliminary QCSEE program - Test results --- Quiet Clean Short-haul Experimental Engine
[SAE PAPER 771008] p0181 A78-23840
Ramjet propulsion for single-stage-to-orbit vehicles
[SAE PAPER 771011] p0182 A78-23843
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
Advanced quiet propulsion for general aviation
[DGLR PAPER 77-044] p0190 A78-24433
Special problems in the development of the propulsion system for an over-the-wing engine configuration
[DGLR PAPER 77-046] p0190 A78-24435
RB 211 - Progress and prospects
p0217 A78-25141
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
Tentative establishment of a mathematical model of a turbojet engine as a controlled system
p0229 A78-27567
General aviation energy-conservation research programs at NASA-Lewis Research Center --- for non-turbine general aviation engines
p0276 A78-29330
Influence of structural components of a by-pass engine on its flight characteristics --- STOL aircraft
p0277 A78-29582
Main characteristics of the ADT 4000-4100 digital computer for a hybrid computing system --- for jet engine simulation
p0277 A78-29589
Evolution of the aircraft gas turbine engine
p0282 A78-30257
Choice of engine design for small transport aircraft
p0283 A78-30357
The aircraft ducted fan
p0286 A78-31153
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309

Energy conserving aircraft from the engine viewpoint
p0287 A78-31310
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
An example of additive damping as a cost savings alternative to redesign --- turbofan engine inlet development
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
Gas path sealing in turbine engines
p0330 A78-33218
Aircraft engine design - Development through lessons learned
p0335 A78-34641
Aero engines climb towards better fuel efficiency
p0372 A78-37114
Rolls-Royce RB401 turbofan - A new business jet engine for the 1980's
p0375 A78-37538
Investigating the efficiency of gas turbines in off-design operation --- multistage experimental data
p0377 A78-37860
Loss prediction in axial compressors - A bibliographic study
[ONERA, TP NO. 1978-65] p0383 A78-38892
Aircraft engine design and development through lessons learned
p0419 A78-41507
Inlet flow distortions in axial flow compressors
p0419 A78-41508
Computer aided design of radial gas turbines - A method for determining the overall rotor dimensions
p0419 A78-41509
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Propulsion --- NASA program for aircraft fuel consumption reduction
p0461 A78-43360
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
General aviation internal combustion engine research programs at NASA-Lewis Research Center
[AIAA PAPER 78-932] p0462 A78-43505
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
An empirical/analytical design methodology for gas turbine combustors
[AIAA PAPER 78-998] p0464 A78-43545
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
Integration of a variable cycle engine concept in a supersonic cruise aircraft
[AIAA PAPER 78-1049] p0466 A78-43574
Engine options for supersonic cruise aircraft
[AIAA PAPER 78-1054] p0466 A78-43576
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet --- Supersonic Cruise Aircraft Research
[AIAA PAPER 78-961] p0474 A78-45096
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
Design philosophy for engine forgings
p0509 A78-47452
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497
Operating characteristics of bypass turbojet engines --- Russian book
p0540 A78-50125
Design and verification of a turbofan Swirl augmentor
p0572 A78-50564
Recent status on research and development of PJR 710 turbofan engine --- for subsonic civil transport aircraft
p0573 A78-50577
Experimental verification of a blade cooling system and comparison with design calculation --- in high temperature test turbine
p0573 A78-50583
Development of the can-type gas turbine combustors
p0574 A78-50590
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
Development of the experimental gas turbine bus
p0575 A78-50601
Advantages of 3-shaft KTT gas turbine configurations for automotive applications
p0575 A78-50602
A development of advanced radial gas turbine for automobile
p0575 A78-50603
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
A research on centrifugal compressor for small gas turbine - The effect of recirculating flow --- automobile engines
p0576 A78-50612
Noise control analysis for gas turbine installations
p0577 A78-50621
Assessment of the structural-mechanical design of commercial aircraft gas turbine engines
p0578 A78-50625
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
Search-method optimization of the balancing of flexible rotors of gas turbine engines
p0581 A78-50795
Future large civil turbofans and powerplants /Seventeenth Short Bros. Commemorative Lecture/
p0587 A78-51519
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle engines
p0599 A78-53511
Better marks on pollution for the SST
p0018 N78-10013
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
The problem of pollution for the SST
[ICAS-PAPER-74-29] p0018 N78-10015
Design, construction and testing of a sub-scale turbojet test cell
[AD-A043005] p0044 N78-11126
Evaluation of a low aspect ratio small axial compressor stage, volume 1
[NASA-CR-135240] p0086 N78-12081
Evaluation of a low aspect ratio small axial compressor stage, volume 2
[NASA-CR-135241] p0086 N78-12082
Engineering summary of powerplant icing technical data
[AD-A045087] p0087 N78-12087

High frequency dynamic engine simulation --- TF-30 engine
[NASA-CR-135313] p0097 N78-13059
Technical evaluation report on the 49th(B) Propulsion and Energetics Specialists Meeting on Power Plant Reliability
[AGARD-AR-110] p0141 N78-14048
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070
Genesis N + 1: The origins of the turbo-jet revolution
p0252 N78-19047
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
Rectangular capture area to circular combustor scramjet engine
[NASA-TM-78657] p0318 N78-21107
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
Low frequency combustion instability in augmentors
p0321 N78-21138
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Fundamental aspects of the aerodynamics of turbojet engine combustors
[NASA-TM-75287] p0398 N78-24142
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095
ACEE propulsion overview
p0446 N78-27048
Engine component improvement: JT8D and JT9D performance improvements
p0447 N78-27052
Energy efficient engine: Preliminary design and integration studies
p0447 N78-27053
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
Status of advanced turboprop technology
p0447 N78-27055
Gas turbine engine emission reduction technology program
p0447 N78-27058
Impact of broad-specification fuels on future jet aircraft --- engine components and performance
p0448 N78-27059
Core compressor exit stage study. Volume 1: Blading design --- turbofan engines
[NASA-CR-135391] p0501 N78-29099
Mixing and combustion in high speed air flows --- combustor design
[AD-A054398] p0503 N78-29188
Advance nozzle technology
p0550 N78-30111
Computer program for the design and off-design performance of turbojet and turbofan engine cycles
[NASA-TM-78653] p0551 N78-30122
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
Reference aircraft for ICAO Working Group E
[NASA-CR-158929] p0609 N78-32087
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108

ENGINE FAILURE
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
Determination of the type of rotating stall in an axial compressor stage
p0131 A78-20255
Modular engine maintenance concept considerations for aircraft turbine engines
[SAE PAPER 770991] p0180 A78-23827
Failure state detection of aircraft engine output sensors
p0184 A78-23906
Failure detection and correction for turbofan engines
p0184 A78-23918
Report on aircraft engine containment
[SAE AIR 1537] p0472 A78-44705
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
Detecting abnormal turbine engine deterioration using electrostatic methods
p0590 A78-51946
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
Types of rotor failure and characteristics of fragments
p0025 N78-10073
Overview of safety research
p0497 N78-29054
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105

ENGINE INLETS
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
An example of additive damping as a cost savings alternative to redesign --- turbofan engine inlet development
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
Boundary layers in axisymmetric inlets at angle of attack. I - Measurements
[AIAA PAPER 78-1109] p0522 A78-48499
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609

Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926
Advanced scavenge systems for an integrated engine inlet particle separator
[AD-A047872] p0210 N78-17069
Test data report, low speed wind tunnel tests of a full scale lift/cruise-fan inlet, with engine, at high angles of attack
[NASA-CR-152055] p0252 N78-19049
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
Inlet/nacelle/exhaust system integration for the QCSEF propulsion systems
p0392 N78-24068
Inlet technology for powered-lift aircraft
p0392 N78-24069
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
Intake design for fighter aircraft
p0549 N78-30110
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7 Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129

ENGINE MONITORING INSTRUMENTS
Failure state detection of aircraft engine output sensors
p0184 A78-23906
AIDS in engine management programmes --- Airborne Integrated Data Systems
p0510 A78-47865
Detecting abnormal turbine engine deterioration using electrostatic methods
[AIAA PAPER 78-1473] p0513 A78-47919
Sensor technology for turbine engine monitoring systems
[AIAA PAPER 78-1474] p0513 A78-47920
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
Use of a field bench for testing turbojet engines
p0527 A78-49731
Detecting abnormal turbine engine deterioration using electrostatic methods
p0590 A78-51946
AIDS - Aircraft-integrated-data-system
p0600 A78-53675
Application of a flight-line disk crack detector to a small engine
p0027 N78-10088

ENGINE NOISE
The quiet battle over aircraft noise
p0058 A78-15167
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
Generation and suppression of fan-compressor noise
p0075 A78-16599
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
Core engine noise reduction - Definition and trends --- aircraft turboengine noise
[AIAA PAPER 77-1273] p0130 A78-19978
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft
[AIAA PAPER 78-242] p0162 A78-20765
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Aircraft noise and its sources
p0283 A78-30351
Aircraft noise --- aerodynamic engineering for noise reduction
p0329 A78-33085
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
State-of-the-art of turbofan engine noise control
p0340 A78-35658
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
Noise control analysis for gas turbine installations
p0577 A78-50621
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives --- light aircraft Sportavia S5
[BMVG-FBWT-77-16] p0245 N78-18072
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report --- outdoor static and 40 x 80 ft. wind tunnel tests
[NASA-CR-152076] p0271 N78-19899
Design of propellers for minimum noise
p0351 N78-22094
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
Propulsion systems noise technology
p0447 N78-27056
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107

ENGINE PARTS
The state of development of ceramic components for gas turbines
[DGLR PAPER 77-072] p0116 A78-18703
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines

[AIAA PAPER 78-93] p0158 A78-20683
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 A78-24910
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
Formation of residual stresses in the thermal strengthening of gas-turbine engine components
p0426 A78-42740
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
Identification of material for AN, MS, and AS engine and propeller standard utility parts and also for company parts
[SAE AS 269G] p0471 A78-44680
Preferred electrical connectors for aerospace vehicles and associated equipment
[SAE ARP 1308A] p0471 A78-44688
Methods of achieving electromagnetic compatibility of gas turbine engine accessories, for self-propelled vehicles
[SAE AIR 1425] p0472 A78-44700
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
Operation of oil seales of aircraft piston engines under conditions of cavitation. I
p0507 A78-47175
Aspects of the thermal fatigue strength of gas-turbine engine components
p0523 A78-49176
Development of ceramic components for an automotive gas turbine
p0578 A78-50632
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
Maintenance of gas turbine accessory equipment
p0597 A78-53175
Investigation of the heat regime of gas turbine engine bearings --- Russian book
p0598 A78-53431
Fabrication and assembly of cable strands for aircraft engines --- Russian book
p0599 A78-53432
Design of rotors for improved structural life
p0027 N78-10085
Materials and manufacturing processes for increased life/reliability --- of turbine wheels
p0027 N78-10086
NDE: A key to engine rotor life prediction
p0027 N78-10087
Turbine disks for improved reliability
p0027 N78-10089
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091
Some problems of exploitation of jet turbine aircraft engines of Lot Polish Air Lines
[AD-A046221] p0151 N78-15048
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071
Gas path sealing in turbine engines
[NASA-TM-73890] p0318 N78-21109
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
Titanium damage tolerant design data for propulsion systems --- gas turbine engine components
[AD-A053252] p0442 N78-26202
Engine component improvement: JT8D and JT9D performance improvements
p0447 N78-27052
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
Impact of broad-specification fuels on future jet aircraft --- engine components and performance
p0448 N78-27059
Ceramic technology readiness program
[PE-2664-3] p0457 N78-27279
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099

ENGINE STARTERS
The start-up of a gas turbine engine using compressed air tangentially fed onto the blades of the basic turbine
p0187 A78-24149
Aircraft auxiliary power units --- Russian book
p0377 A78-37885
Expendable design concept --- applied to gas generator for jet fuel starter
[AIAA PAPER 78-964] p0463 A78-43523
Pneumatic ground power supplies for starting aircraft
[SAE AIR 944A] p0472 A78-44693
Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-PRC-10113-1] p0265 N78-19166
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Evaluation of a pressurized air start system for advanced army helicopters --- gas turbine engines
[AD-A051967] p0360 N78-23082

ENGINE TESTING LABORATORIES
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
Instrumentation and control for a large engine test facility
p0107 A78-17584
TF-30-P-7 installed trim correction
[AD-A047023] p0199 N78-16058
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060

ENGINE TESTS
NT COLD FLOW TESTS
NT STATIC FIRING
Energy conservation in aeronautical ground testing
p0002 A78-11103
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Calibration of gas turbine instrumentation
p0105 A78-17361
Sound separation probes for flowing duct noise measurements --- jet engine diagnostics
p0106 A78-17396
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410
Recent results on early diagnosis of damage in moving parts of aircraft engines
p0115 A78-18506
Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
Toward scramjet aircraft --- progress in engine development
p0177 A78-23421
Development of low pressure ratio vectoring nozzles for V/STOL aircraft
[SAE PAPER 770988] p0180 A78-23825
Gas turbine module performance analysis
[SAE PAPER 770992] p0180 A78-23828
Gas path analysis applied to pre and post overhaul testing of JT9D turbofan engine
[SAE PAPER 770993] p0180 A78-23829
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830

Preliminary QCSEE program - Test results --- Quiet Clean Short-haul Experimental Engine
[SAE PAPER 771008] p0181 A78-23840
Theory of two frequency ranges of unstable oscillations of turbulent combustion in a jet-engine chamber. I - Formulation of the stability problem, the characteristic equation
p0187 A78-24253
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
Unique test capabilities of the Eglin AFB McKinley Climatic Laboratory
p0291 A78-32127
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
Data acquisition in the case of a jet-engine test stand
p0335 A78-34488
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
Aircraft engine design - Development through lessons learned
p0335 A78-34641
Operational experience with long-safe-life gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
A subsonic ramjet engine for expendable drones
[AIAA PAPER 78-962] p0463 A78-43522
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592
Investigation of turbine stages with radial blades
p0467 A78-43643
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
Analysis of GTE tolerance monitoring parameter formation --- gas turbine engine
p0517 A78-48212
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
Use of a field bench for testing turbojet engines
p0527 A78-49731
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
Variability of emissions measurements on a small gas turbine engine
p0572 A78-50569
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Internal performance predictions for Langley scramjet engine module
[NASA-TM-X-74038] p0208 N78-17057
Low speed test of a high-bypass-ratio propulsion system with an asymmetric inlet designed for a tilt-nacelle V/STOL airplane
[NASA-CR-152072] p0209 N78-17062
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
Lightweight, low compression aircraft diesel engine --- converting a spark ignition engine to the diesel cycle
[NASA-CR-135300] p0325 N78-21471
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
Pilot model air cushion vehicle (LACV-30) program
[AD-A053686] p0492 N78-28275
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131
Large scale static tests of a tilt-nacelle V/STOL propulsion/attitude control system
[NASA-CR-152181] p0611 N78-32098
ENGINEERING DEVELOPMENT
U PRODUCT DEVELOPMENT
ENGINEERING MANAGEMENT
Back to the drawing board --- management of design engineering
p0126 A78-19548
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911
ENGINES
NT AIR BREATHING ENGINES
NT DIESEL ENGINES
NT DUCTED FAN ENGINES
NT GAS TURBINE ENGINES
NT HELICOPTER ENGINES
NT HYDROGEN ENGINES
NT INTERNAL COMBUSTION ENGINES
NT J-85 ENGINE
NT JET ENGINES
NT PISTON ENGINES
NT PULSED JET ENGINES
NT RAMJET ENGINES
NT RETROROCKET ENGINES
NT ROCKET ENGINES

NT SOLID PROPELLANT ROCKET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
NT T-38 ENGINE
NT T-55 ENGINE
NT T-58 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT TURBINE ENGINES
NT TURBOFAN ENGINES
NT TURBOJET ENGINES
NT TURBOPROP ENGINES
NT VARIABLE CYCLE ENGINES
NT WANKEL ENGINES
ENGLISH ELECTRIC AIRCRAFT
NT CANBERRA AIRCRAFT
ENGLISH ELECTRIC CANBERRA AIRCRAFT
U CANBERRA AIRCRAFT
ENHANCEMENT
U AUGMENTATION
ENTHALPY
Driver gas contamination in a high-enthalpy reflected shock tunnel
p0223 A78-26235
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
ENTRAINMENT
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
ENTROPY
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
Interaction of a shock wave with an entropy layer
p0164 A78-20886
Entropy layer in two-dimensional flows --- hypersonic ideal gas flow behind shock wave
p0168 A78-21132
ENVIRONMENT EFFECTS
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Application of composites on civil aircraft
p0218 A78-25199
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
More public consultation on airport plans
p0275 A78-29208
Planning and design of small airports in Canada
p0341 A78-35668
Study on problems of terminal site location --- environmental effects on airport, harbor or truck depot
p0369 A78-36323
A three-dimensional finite-difference solution of the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536
Environmental effects on composites for aircraft
[NASA-TM-78716] p0410 N78-25135
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints --- in aircraft structures
[DLR-FB-77-63] p0567 N78-31251
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
ENVIRONMENT MODELS
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
ENVIRONMENT POLLUTION
NT AIR POLLUTION
NT WATER POLLUTION
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
ENVIRONMENT PROTECTION
The Dash 7 - An aircraft for today's environment
p0004 A78-12213
Aircraft noise control
p0015 A78-12814
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
Airport/community environmental planning
p0284 A78-30678
Results of Concorde monitoring
p0340 A78-35655
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
Acoustical standards and their application to aircraft noise
p0341 A78-35661
Study on problems of terminal site location --- environmental effects on airport, harbor or truck depot
p0369 A78-36323
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624
ENVIRONMENT SIMULATION
NT SPACE ENVIRONMENT SIMULATION
NT THERMAL SIMULATION
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer
p0420 A78-41512
A computer-controlled system for fatigue testing under simulated service loading --- for aircraft structures
p0420 A78-41519
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
Satellite communications mode simulation tests for oceanic air traffic control
[AD-A052546] p0458 N78-27313
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
ENVIRONMENT SIMULATORS
NT LANGLEY COMPLEX COORDINATOR
Optical simulator with a holographic component --- infinity display system
[AIAA 78-1581] p0579 A78-50671
ENVIRONMENTAL CHAMBERS
U TEST CHAMBERS
ENVIRONMENTAL CONTROL
Aircraft avionics cooling, present and future
p0060 A78-15558
Advanced environmental control for avionic systems
p0060 A78-15559
Fault isolation in environmental control systems of commercial transports
[SAE AIR 1266] p0472 A78-44696
ENVIRONMENTAL QUALITY
NT AIR QUALITY
NT WATER QUALITY
Noise in airports, its measurement, and its effect on the communities in the vicinity
p0519 A78-48374
ENVIRONMENTAL SURVEYS
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
Urban noise pollution. A bibliography with abstracts
[NTIS/PS-78/0686/2] p0634 N78-33634

ENVIRONMENTAL TEMPERATURE
U AMBIENT TEMPERATURE
ENVIRONMENTAL TESTS
NT CORROSION TESTS
NT HIGH TEMPERATURE TESTS
NT SALT SPRAY TESTS
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
Environmental tests and logistics support costs
p0061 A78-15560
Development of a combined environment test for reliability assessment of avionics systems
p0061 A78-15561
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
A test using simulated mission profile environments --- Airborne Instrumentation Subsystem pod reliability
p0291 A78-32126
Unique test capabilities of the Eglin AFB McKinley Climatic Laboratory
p0291 A78-32127
Practical experience in vibration testing external avionics systems
p0292 A78-32134
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
Fiber optic development for tactical fighter applications
p0534 A78-49906
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079
Environmental effects on composites for aircraft
p0448 N78-27061
ENVIRONMENTS
NT AEROSPACE ENVIRONMENTS
NT HIGH ALTITUDE ENVIRONMENTS
NT HIGH GRAVITY ENVIRONMENTS
NT HIGH TEMPERATURE ENVIRONMENTS
NT MARINE ENVIRONMENTS
NT MARS ATMOSPHERE
NT MESOSPHERE
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
EOSS
Earth-to-orbital station radio bridge
p0621 N78-33019
EPNL
U EFFECTIVE PERCEIVED NOISE LEVELS
EPOCHS
U TIME MEASUREMENT
EPOXY COMPOUNDS
NT BORON-EPOXY COMPOUNDS
EPOXY RESINS
Epoxy and polyurethane paint compositions for agricultural airplanes
[AD-A045914] p0144 N78-14173
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273
EQUATIONS OF MOTION
NT EULER EQUATIONS OF MOTION
NT HYDRODYNAMIC EQUATIONS
NT KINEMATIC EQUATIONS
NT NAVIER-STOKES EQUATION
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
Numerical study on the stability dependence of geostrophic drag and cross-isobar angle
p0580 A78-50691
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091
Diverse forms and derivations of the equations of motion of deformable aircraft and their mutual relationship
[RAE-TR-77077] p0548 N78-30097
Dynamic analysis of flexible rotor-bearing systems using a model approach
p0616 N78-32424
Forced vibration of thin elastic shells with application to fractional horsepower hermetic refrigeration compressor shells
p0616 N78-32457
EQUILIBRIUM FLOW
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611
EQUIPMENT
NT PERIPHERAL EQUIPMENT (COMPUTERS)
EQUIPMENT SPECIFICATIONS
Identification of material for AN, MS, and AS engine and propeller standard utility parts and also for company parts
[SAE AS 269G] p0471 A78-44680
Aeronautical procurement - The primary specification system
[AIAA PAPER 78-1489] p0514 A78-47932
ASD strobe light evaluation --- luminous intensity requirements for aircraft anticollision lights
[AD-A045533] p0095 N78-13036
The 0.1m subsonic cryogenic tunnel at the University of Southampton
[NASA-CR-145305] p0247 N78-18086
Rotor design implications for composite material properties
[UCRL-80117] p0553 N78-30182
Physical characteristics: Aviation materiel --- Army test facilities and equipment
[AD-A055803] p0610 N78-32093
EQUIVALENT CIRCUITS
EMP response of aircraft antennas
p0169 A78-21992
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
ERECTION
U CONSTRUCTION
ERGONOMICS
U HUMAN FACTORS ENGINEERING
EROSION
NT WATER EROSION
NT WIND EROSION
Erosion resistant coatings --- for aircraft parts
p0120 A78-19056
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
Some effects of temperature on the erosion of metals
p0588 A78-51594
Mathematical analysis of impact erosion --- of supersonic flight vehicles
p0588 A78-51711
Erosion prevention and film cooling on vanes
p0320 N78-21128
Hardened reentry vehicle development program. Erosion-resistant nosetip technology
[AD-A056390] p0630 N78-33128
Ceramics technology readiness development program. Phase 1: Conceptual designs and material screening --- erosion/corrosion resistance
[PE-2786-12] p0632 N78-33243
ERROR ANALYSIS
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
EAR navigation update modes --- Electronically Agile Radar
p0066 A78-15667
The evaluation of the operational characteristics of navigation systems
p0070 A78-15918
Comparisons of tabular and observed Omega corrections through use of spectral analysis techniques
p0070 A78-15920
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed

sensors --- German book
p0228 A78-27383
Correlation of the errors of the Omega radio navigation system
p0475 A78-45118
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
A review of human factors investigation studies in aircraft accidents during the period 1957-1977 in Aeromedical Laboratory, JASDF
p0587 A78-51497
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
Sources of variability and inaccuracies in aircraft gas turbine emission measurements
[PB-270898/0] p0099 N78-13069
Metrology of aircraft overflight noise. Errors due to its nonstationary character
p0358 N78-23038
Experimental determination of the navigation error of the 4-D navigation, guidance, and control systems on the NASA B-737 airplane
p0433 N78-26071
Analysis of error sources in predicted flight performance
p0435 N78-26087
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
Inherent errors in asynchronous digital flight controls
[AD-A055649] p0565 N78-31124
ERROR BAND
U ACCURACY
ERROR CORRECTING CODES
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
Estimated temperature corrections for the Menaka-II meteorological rocket payload
p0479 A78-45341
ERROR CORRECTING DEVICES
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
ERROR DETECTION CODES
Fault-tolerant software for aircraft control systems
[NASA-CR-145298] p0251 N78-18797
ERROR FUNCTIONS
The error function of analytical structural design --- in aircraft component failure in static tests
p0291 A78-32123
ERROR SIGNALS
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
ERRORS
NT INSTRUMENT ERRORS
NT PHASE ERROR
NT PILOT ERROR
NT POSITION ERRORS
NT ROOT-MEAN-SQUARE ERRORS
NT VELOCITY ERRORS
ESA
U EUROPEAN SPACE AGENCY
ESA SATELLITES
NT AEROSAT SATELLITES
NT GEOS SATELLITES (ESA)
NT MAROTS (ESA)
ESCAPE (ABANDONMENT)
The principles of underwater escape from aircraft
[AGARD-AG-230] p0094 N78-13032
ESCAPE CAPSULES
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
ESCAPE SYSTEMS
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
A study of the desirability and feasibility of in-flight escape from Army helicopters
[AD-A051153] p0359 N78-23071
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
ESRO
U EUROPEAN SPACE AGENCY
ESTERS
NT URETHANES
ESTIMATES
NT COST ESTIMATES
ESTIMATING
NT ORBITAL POSITION ESTIMATION
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314
ESTIMATORS
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
ETTINGSHAUSEN COOLERS
U THERMOELECTRIC COOLING
EUCLIDEAN GEOMETRY
NT ANGLE OF ATTACK
NT CUBES (MATHEMATICS)
NT DESCRIPTIVE GEOMETRY
NT ELEVATION ANGLE
NT HYPERBOLAS
NT PYRAMIDS
NT SPHEROIDS
NT TRIANGLES
EULER EQUATIONS OF MOTION
Calculation of supersonic flows past wings with allowance for trailing tangential discontinuities within the framework of a model employing a system of Euler equations
p0274 A78-28958
Numerical implementation of solid-body boundary conditions for the Euler equations --- in fluid dynamics
p0584 A78-51175
EUROPE
European air transport up to the year 2000 /Lord Douglas of Kirtleside Lecture/
p0587 A78-51520
EUROPEAN AIRBUS
NT A-300 AIRCRAFT
Low-speed wind-tunnel tests of the longitudinal stability characteristics of some swept-wing quiet Airbus configurations
[ARC-R/M-3801] p0141 N78-14042
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
EUROPEAN SPACE AGENCY
Assess II - A simulated mission of Spacelab
p0569 A78-50276
EUROPEAN SPACE RESEARCH ORGANIZATION
U EUROPEAN SPACE AGENCY
EUTECTIC ALLOYS
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
EUTECTICS
NT EUTECTIC ALLOYS
The promise of eutectics for aircraft turbines
p0215 A78-24882

The promise of eutectics for aircraft turbines
[NASA-TM-73714] p0028 N78-10098
EVALUATION
Possibilities and goals for the future SST
[AIAA-PAPER-75-254] p0017 N78-10006
Airport improvement task force delay study: Delay model validation plan
[AD-A048112] p0211 N78-17077
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
EVAPORATION
NT TRANSPIRATION
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798
EVAPORATIVE COOLING
NT FILM COOLING
NT SWEAT COOLING
EVASIVE ACTIONS
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
Mutual counteraction of two moving objects. I --- remote optimal encounter guidance
p0338 A78-34960
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
Optimal missile evasion
[AD-A053267] p0439 N78-26135
EXCITATION
NT ACOUSTIC EXCITATION
NT SELF EXCITATION
EXCLUSION
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
EXECUTIVE AIRCRAFT
U GENERAL AVIATION AIRCRAFT
U PASSENGER AIRCRAFT
EXHAUST DIFFUSERS
Boundary layer blowing tests on a radial diffuser in low and subsonic Mach range
p0374 A78-37411
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
EXHAUST FLOW SIMULATION
NT ATMOSPHERIC ENTRY SIMULATION
NT FLIGHT SIMULATION
Numerical simulation of the interaction of jet and freestream flows in engine exhaust systems
[AIAA PAPER 78-144] p0173 A78-22584
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
Effect of a simulated engine jet blowing above an arrow wing at Mach 2.0
[NASA-TP-1050] p0020 N78-10030
EXHAUST GASES
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
Reduction of aircraft gas turbine engine pollutant emissions - A status report
p0480 A78-45429
Gas turbine engine emissions - Problems, progress and future
p0524 A78-49336
Variability of emissions measurements on a small gas turbine engine
p0572 A78-50569
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
Aircraft engine emissions --- conference
[NASA-CP-2021] p0038 N78-11063
Environmental protection agency aircraft emissions standards
p0038 N78-11064
Emissions reduction technology program
p0039 N78-11065
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
Pollution reduction technology program for turboprop engines
p0039 N78-11069
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070
Summary of emissions reduction technology programs
p0039 N78-11071
Emissions control for ground power gas turbines
p0039 N78-11072
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Global atmospheric sampling program
p0040 N78-11076
Stratospheric cruise emission reduction program
p0040 N78-11077
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
Infrared radiation from the exhaust jet of a J85-GE-5 turbojet
[AD-A043282] p0042 N78-11110
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TN-D-8449] p0081 N78-12037
Evaluation of an automated smoke abatement system for jet engine test cells
[AD-A044587] p0089 N78-12107
Augmentor emissions reduction technology program --- for turbofan engines
[NASA-CR-135215] p0097 N78-13057
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066
Sources of variability and inaccuracies in aircraft gas turbine emission measurements
[PB-270898/0] p0099 N78-13069
Test procedure analysis and recommendations for supersonic transport aircraft emission measurement
[PB-270864/2] p0102 N78-13634
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072

Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068
Aircraft emission factors
[PB-275067/7] p0250 N78-18595
Effect of fuel bound nitrogen on oxides of nitrogen emission from a gas turbine engine
[AD-A048382] p0264 N78-19162
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
Reduction of aircraft gas turbine engine pollutant emissions
[NASA-TM-78870] p0351 N78-22098
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
Gas turbine engine emission reduction technology program
p0447 N78-27058
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming O-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
Combustion and emission characteristics of a gas turbine combustor
p0610 N78-32095
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
Non-extractive electro-optical measurement of jet-engine emissions
[AD-A056783] p0628 N78-33105
Turbine engine particulate emission characterization, phase 2
[AD-A057370] p0628 N78-33106

EXHAUST JETS
U EXHAUST GASES

EXHAUST NOZZLES
NT CONVERGENT-DIVERGENT NOZZLES
NT TURBINE EXHAUST NOZZLES
Calculated heating on the afterbody nozzle of a hypersonic aircraft concept
p0072 A78-16186
Numerical simulation of the interaction of jet and freestream flows in engine exhaust systems
[AIAA PAPER 78-144] p0173 A78-22584
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
Theoretical analysis of a loop type flexible skirt air cushion
[JTIAS-TN-204] p0081 N78-12029
Upper-surface-blowing flow-turning performance
p0389 N78-24048
Aerodynamic characteristics induced on a supercritical wing due to vectoring twin nozzles at Mach numbers from 0.40 to 0.95
[NASA-TM-78746] p0543 N78-30039
Advance nozzle technology
p0550 N78-30111
Flight effects on the aerodynamic and acoustic characteristics of inverted profile coannular nozzles
[NASA-CR-3018] p0621 N78-32836

EXHAUST SYSTEMS
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068

EXHAUST VELOCITY
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683

EXITS (DOORS)
U DOORS

EXPANDABLE STRUCTURES
NT BALLOONS
NT HIGH ALTITUDE BALLOONS
NT INFLATABLE STRUCTURES
NT METEOROLOGICAL BALLOONS
NT SKYHOOK BALLOONS
NT TETHERED BALLOONS

EXPANSION
NT GAS EXPANSION
NT PRANDTL-MEYER EXPANSION
NT THERMAL EXPANSION

EXPANSION WAVES
U ELASTIC WAVES

EXPERIMENTAL DESIGN
Load sequences for laboratory simulation of flight-by-flight stress spectra --- of aircraft structural fatigue
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091

EXPLOSIONS
NT AERIAL EXPLOSIONS
NT NUCLEAR EXPLOSIONS
NT THERMONUCLEAR EXPLOSIONS
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122

EXPLOSIVE DEVICES
NT BOMBS (ORDNANCE)

EXPLOSIVE GASES
U FLAMMABLE GASES

EXPRESSIONS (MATHEMATICS)
U FORMULAS (MATHEMATICS)

EXTERNAL STORE SEPARATION
Six degrees of freedom system for store separation studies in ONERA wind-tunnels
[ONERA, TP NO. 1977-100] p0191 A78-24460

EXTERNAL STORES
NT PODS (EXTERNAL STORES)
Clearance of new stores for military aircraft - An overview of the techniques used
p0074 A78-16597
F-16 flutter model studies with external wing stores
p0117 A78-18801
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
Effects of external stores on the aerodynamic characteristics of a 60 deg delta-wing fighter model at Mach 1.60 to 2.87 --- conducted in the Langley Unitary Plan wind tunnel
[NASA-TM-74090] p0081 N78-12033
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external

stores
[DLR-FB-77-21] p0238 N78-18014
Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
Graphics for the hybrid stores separation simulation of the B77 system
[SAND-78-8212] p0562 N78-31099
Influences of sway braces and mounting gaps on the static aerodynamic loading of external stores
[AD-A054963] p0607 N78-32068

EXTERNAL SURFACE CURRENTS
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349

EXTERNALLY BLOWN FLAPS
NT UPPER SURFACE BLOWN FLAPS
Wind tunnel experiments on a NACA 632-A215 wing profile with boundary layer control through blowing on the leading edge
p0121 A78-19075
EBF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Wings with controlled separation
[DGLR PAPER 77-028] p0189 A78-24419
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
EBF noise suppression and aerodynamic penalties
[NASA-TM-73823] p0155 N78-15852
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TN-D-8235] p0194 N78-15999
A method for calculating externally blown flap noise
[NASA-CR-2954] p0311 N78-20920
Externally blown flap impingement parameters
p0390 N78-24053
Some measurements of an EBF powered-lift wake
p0390 N78-24054
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065

EXTINGUISHERS
U FIRE EXTINGUISHERS

EXTRAPOLATION
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074

EXTRATERRESTRIAL ENVIRONMENTS
NT MARS ATMOSPHERE

EXTRATERRESTRIAL RADIATION
NT SOLAR RADIATION

EXTREMELY HIGH FREQUENCIES
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
Dual band airborne SATCOM terminal
p0537 A78-49972

EXTREMUM VALUES
NT MINIMA
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076

F

F-4 AIRCRAFT
F-4E austère heads-up display/gunsight evaluation
p0124 A78-19434
The F-4E Austere HUD/Gunsight project
p0380 A78-38746
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
F-4E fire control system simulator, F-4E austere/heads up display (HUD), SEAFAC programs
[AD-A042255] p0031 N78-10124
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces --- aging of airframe materials
[AD-A045277] p0096 N78-13049
F-4E avionics update
[AD-A047949] p0243 N78-18061
A study of the F-4 Program Management Responsibility Transfer (PMRT) from the Air Force Systems Command to the Logistics Command
[AD-A052903] p0413 N78-25974
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090

F-5 AIRCRAFT
Digital real time simulation of the F-5E/F flight director computer
[AIAA 77-1528] p0008 A78-12267
F-5E/F spin avoidance testing
p0380 A78-38747
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888

F-8 AIRCRAFT
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data --- Failure Detection and Identification for Digital Fly-By-Wire control
[AIAA 77-1506] p0007 A78-12252
NASA's advanced control law program for the F-8 digital fly-by-wire aircraft
p0013 A78-12357
Adaptive control laws for F-8 flight test
p0013 A78-12358
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
A moving window parameter adaptive control system for the F8-DFBW aircraft
p0013 A78-12361
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
A learning flight control system for the F8-DFBW aircraft --- Digital Fly-By-Wire
[AIAA 78-1288] p0542 A78-50195
The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at

Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 1.5 to 2.0 --- conducted in the Ames 9 by 7 foot supersonic wind tunnel
[NASA-TM-73271] p0199 N78-16062
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
Description and theory of operation of the computer by-pass system for the NASA F-8 digital fly-by-wire control system
[NASA-CR-144865] p0349 N78-22076
A learning control system with application to flight systems
p0629 N78-33112

F-110 AIRCRAFT
U F-4 AIRCRAFT

F-14 AIRCRAFT
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
Evaluation of a lip-seal hydraulic fitting for the F-14 aircraft
[AD-A051159] p0396 N78-24120
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108

F-15 AIRCRAFT
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
F-15/16 canopy off testing
p0233 A78-28453
The RF-15: Reconnaissance derivative of the F-15
p0415 A78-40219
Subsystem verification of an AFLC organically developed F-15 simulation --- Air Force Logistics Command
p0533 A78-49901
F-15 avionics Built-in-Test
p0539 A78-49991
Captive carriage vibration of air-to-air missiles on fighter aircraft --- F-15 flight measurements
p0587 A78-51470
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
A study of opportunistic replacement tactics for modular jet engine management
[AD-A044184] p0079 N78-12001
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 1: Validation and sensitivity study
[AD-A045034] p0085 N78-12077
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 2: Interpretation of the integrated margin
[AD-A045035] p0086 N78-12078
An evaluation of the capability of the logistics composite model to project the monthly aircraft sortie effectiveness of an F-15 wing
[AD-A047227] p0193 N78-15993
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
Flight test verification of F-15 performance predictions
p0436 N78-26090
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064

F-16 AIRCRAFT
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
The F-16 sampled data assembly
p0063 A78-15618
Stores management and data bus systems --- for F-16 aircraft
p0066 A78-15660
Shop test success is a function of the airborne system design --- F-16 weapon avionics
p0068 A78-15699
An advanced composite wing for the F-16
p0077 A78-16920
F-16's ISAs reduce cost, weight, and leakage --- hydraulic integrated servoactuators for flight control
p0108 A78-17737
F-16 flutter model studies with external wing stores
p0117 A78-18801
F-16 progress in performance flight testing using an inertial navigation unit
p0123 A78-19427
F-16 flight test progress report
p0232 A78-28452
F-15/16 canopy off testing
p0233 A78-28453
Interface design considerations for F-16 sensors and weapons
p0532 A78-49874
An interface management approach to software development
p0535 A78-49933
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004
A discrete-event digital simulation model of the F-16 fire control computer operational flight program using simscript 2.5
[AD-A048164] p0207 N78-17047
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
Correlation of F-16 aerodynamics and performance predictions with early flight test results
p0436 N78-26092
Evaluation of F-16 radar attachment assemblies for reusable containers
[AD-A053424] p0459 N78-27432

Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Status of the Air Force's F-16 aircraft program
[PB-280304/7] p0567 N78-31946
Pitch rate flight control for the F-16 aircraft to improve air-to-air combat
[AD-A055417] p0612 N78-32107
F-17 AIRCRAFT
F-18A --- configurational development from YF-17 prototype
p0233 A78-28454
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
F-18 AIRCRAFT
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
'New look' in assurance technology - 'The Hornet' --- reliability and maintainability of F-18
[AIAA PAPER 78-323] p0185 A78-24017
F-18A --- configurational development from YF-17 prototype
p0233 A78-28454
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
Fighter superiority by design
p0549 N78-30105
F-27 AIRCRAFT
A statistical test of the calculated mean fatigue life using service experience --- applied to F-27 drag stay bracket
[FOK-S-144] p0440 N78-26138
F-28 TRANSPORT AIRCRAFT
The short-haul jet designed with ATC in mind
p0587 A78-51516
Adhesion of erosion resistant tapes on several surface configurations
[FOK-R-2132] p0442 N78-26220
F-100 AIRCRAFT
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
Analytical study of thermal barrier coated first-stage blades in an F100 engine
[NASA-CR-135359] p0208 N78-17058
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
F100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145
F-101 AIRCRAFT
Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068
F-102 AIRCRAFT
YF 102 in-duct combustor noise measurement, volume 1
[NASA-CR-135404-VOL-1] p0412 N78-25827
YF 102 in-duct combustor noise measurement, volume 3
[NASA-CR-135404-VOL-3] p0412 N78-25829
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
F-106 AIRCRAFT
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance study. User's manual --- computer programs
[AD-A045625] p0091 N78-13001
F-106 scheduled maintenance improvement summary --- management methods
[AD-A045400] p0092 N78-13002
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083
F-111 AIRCRAFT
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics
p0064 A78-15636
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
TF-30-P-7 installed trim correction
[AD-A047023] p0199 N78-16058
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
F-111 depot fuselage fuel tank deseal/reseal procedures
[AD-A050819] p0349 N78-22078
Flight-measured buffet characteristics of a supercritical wing and a conventional wing on a variable-sweep airplane
[NASA-TP-1244] p0358 N78-23056
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118
FAB (PROGRAMMING LANGUAGE)
U FORTRAN
FABRICATION
NT SPACE MANUFACTURING
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943
Quality assurance in the fabrication of products in aviation technology
p0292 A78-32267
Fabrication and assembly of cable strands for aircraft engines --- Russian book

p0599 A78-53432
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
FABRICS
NT PARACHUTE FABRICS
FABRY-PEROT LASERS
U LASERS
FACETS
U FLAT SURFACES
FACTOR ANALYSIS
Factorization methods in hydroaeromechanics --- Russian book
p0378 A78-37887
FACTORIES
U INDUSTRIAL PLANTS
FADING
NT SIGNAL FADING
FAIL-SAFE SYSTEMS
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Dual device redundancy management --- for RPV automatic flight control computer reliability
[AIAA 77-1441] p0015 A78-12695
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
Fault tolerant flight controls
p0274 A78-28900
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769
FAA's certification position on advanced avionics
p0335 A78-34642
The products-liability movement has improved aviation safety
p0335 A78-34644
A simplified instrument failure detection scheme
p0481 A78-46377
F-15 avionics Built-in-Test
p0539 A78-49991
FAILURE
NT BURNTHROUGH (FAILURE)
NT ENGINE FAILURE
NT STRUCTURAL FAILURE
NT SYSTEM FAILURES
FAILURE ANALYSIS
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data --- Failure Detection and Identification for Digital Fly-By-Wire control
[AIAA 77-1506] p0007 A78-12252
Application of fracture mechanics data to aerospace design
p0050 A78-13414
Recent results on early diagnosis of damage in moving parts of aircraft engines
p0115 A78-18506
Model study of dynamic response of landing mat
p0117 A78-18755
Systems analysis of safety in aviation. I
p0178 A78-23470
Failure state detection of aircraft engine output sensors
p0184 A78-23906
Failure detection and correction for turbofan engines
p0184 A78-23918
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress --- aircraft structural failures
p0332 A78-33700
Aircraft engine design - Development through lessons learned
p0335 A78-34641
Application of resistance curves to residual strength prediction
p0339 A78-35380
Reliability of aviation techniques and flight safety --- Russian book
p0371 A78-36494
Fault isolation in environmental control systems of commercial transports
[SAE AIR 1266] p0472 A78-44696
A simplified instrument failure detection scheme
p0481 A78-46377
Detecting abnormal turbine engine deterioration using electrostatic methods
[AIAA PAPER 78-1473] p0513 A78-47919
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Types of rotor failure and characteristics of fragments
p0025 N78-10073
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
Application of failure analysis in aviation
[NLR-MP-77002-U] p0145 N78-14449
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454
Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings
[AD-A053834] p0455 N78-27133
FAILURE MODES
Detection of sensor failure and output reconstruction for aircraft engine controls
[AIAA PAPER 78-4] p0157 A78-20627
Metallurgical behavior of arresting gear deck pendants
p0218 A78-25185
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
FAIRCHILD MILITARY AIRCRAFT
U MILITARY AIRCRAFT
FAIRINGS
Machine algorithm for determining the cross sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
Antenna fairings for flight vehicles /2nd revised and enlarged edition/ --- Russian book
p0598 A78-53426
FALLOUT
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
FANLIFT DEVICES
U LIFT FANS
FANS
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112

FAR FIELDS
Two point correlations of jet noise
p0176 A78-23219
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
Instrument landing system improvement program: Far-field monitoring
[AD-A042320/2] p0024 N78-10063
FAST FOURIER TRANSFORMATIONS
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
Evaluation of airborne radar Doppler processors
p0374 A78-37477
FASTENERS
NT ANCHORS (FASTENERS)
NT BOLTS
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
Analytical representation of the initial quality of fastener holes --- for aircraft structures
p0217 A78-25180
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress --- aircraft structural failures
p0332 A78-33700
Fatigue strength of joints with special fasteners, part 2
[RAE-LIB-TRANS-1920] p0145 N78-14408
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
Recess fasteners
[AD-A053221] p0443 N78-26449
On the detection and measurement of cracks in critically loaded holes
p0444 N78-26469
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112
FATIGUE (MATERIALS)
NT METAL FATIGUE
NT STRUCTURAL STRAIN
The geriatric jet problem
p0014 A78-12600
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
Fatigue crack propagation of titanium alloys under dwell-time conditions
p0387 A78-39596
Engine non-containment: The UK CAA view
p0025 N78-10070
Types of rotor failure and characteristics of fragments
p0025 N78-10073
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Review of investigations on aeronautical fatigue in the Federal Republic of Germany, May 1975 - April 1977
[LBF-S-133] p0046 N78-11426
Case studies in fracture mechanics
[AD-A045877] p0102 N78-13482
Fatigue design of fighters: Guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft
[AGARD-AG-231] p0241 N78-18046
Fatigue design of fighters; guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft: General survey
p0241 N78-18047
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
Low cycle fatigue in turbines
[NASA-TM-75264] p0264 N78-19156
Report on aircraft fatigue studies --- in-flight monitoring and stress measurements
[AD-A049876] p0317 N78-21102
The collection and analysis of fatigue damage occurring in aircraft in service
[RAE-LIB-TRANS-1934] p0349 N78-22077
Application to life prediction of design data derived from fatigue tests with service-like load sequences
[RAE-LIB-TRANS-1939] p0356 N78-22388
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0411 N78-25455
Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
Review of aeronautical fatigue investigations in the Netherlands during the period April 1975 to February 1977
[NLR-MP-77005-U] p0494 N78-28494
Aircraft structural fatigue
[ARL/STRUC-REPT-363] p0553 N78-30271
Safety against fatigue in flight: A perspective of Australian experience and research
p0553 N78-30272
Mechanisms of fatigue and fracture
p0553 N78-30273
Fracture mechanics fundamentals with reference to aircraft structural applications
p0554 N78-30274
Structural fatigue testing
p0554 N78-30279
NDI and the detection of fatigue
p0554 N78-30282
The development of the theory of structural fatigue
p0555 N78-30283
Load interaction effects in fatigue crack propagation
p0555 N78-30285
Recent developments in analysis of crack propagation and fracture of practical materials --- stress analysis in aircraft structures
[NASA-TM-78766] p0556 N78-30606
Effect of aircraft loading program modifications on the fatigue life and damage cumulation. Part 1: Effect of load peaks in case of central hole sheet specimens
[TAE-334-PT-1] p0616 N78-32462
FATIGUE DIAGRAMS
U S-N DIAGRAMS
FATIGUE LIFE
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
Reliability of fatigue-stressed structures based on experimental results. II
p0130 A78-20147
Problems of rating the life of aircraft design elements in random loading
p0133 A78-20402
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0282 A78-30259
Fatigue life analysis of the L 13 /Blanik/ glider
p0283 A78-30360
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Fatigue crack growth of titanium fan blades
p0589 A78-51744
Fatigue strength of joints with special fasteners, part 2
[RAE-LIB-TRANS-1920] p0145 N78-14408

Calculation methods for fatigue life and crack propagation
p0241 N78-18049
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454
A statistical test of the calculated mean fatigue life using service experience --- applied to F-27 drag stay bracket
[FOK-S-144] p0440 N78-26138
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455
Fatigue crack propagation analysis of aircraft structures
[AD-A053835] p0459 N78-27456
Aircraft structural fatigue
[ARL/STRUC-REPT-363] p0553 N78-30271
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
Current developments in the life of aircraft structure
p0554 N78-30280
Aircraft structural life monitoring and the problem of corrosion
p0554 N78-30281
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction --- fatigue life of aircraft construction materials
[BMVG-FBWT-77-23] p0555 N78-30603

FATIGUE TESTING MACHINES
Methods and equipment for testing for acoustic fatigue --- of aircraft structural components
p0283 A78-30354
A computer-controlled system for fatigue testing under simulated service loading --- for aircraft structures
p0420 A78-41519

FATIGUE TESTS
Fatigue research on bonded carbon fibre composite/metal joints --- examination of aircraft structural materials
p0002 A78-11400
Structural fatigue reliability based on test results. I
p0057 A78-15025
Reliability of fatigue-stressed structures based on experimental results. II
p0130 A78-20147
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0282 A78-30259
Methods and equipment for testing for acoustic fatigue --- of aircraft structural components
p0283 A78-30354
Basic fatigue curves of aircraft structures
p0283 A78-30356
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
A new propeller for agricultural aircraft
p0327 A78-32645
Load sequences for laboratory simulation of flight-by-flight stress spectra --- of aircraft structural fatigue
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Fatigue strength of the upper guide rail of the A-300 no. 4 landing flap support (tests, results, and evaluation)
[DLR-IB-152-77/09] p0038 N78-11057
Real-time testing of titanium sheet and extrusion coupon specimens subjected to Mach 2.7 supersonic cruise aircraft wing stresses and temperatures
[NASA-CR-2754] p0101 N78-13478
Fatigue design of fighters; guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft: General survey
p0241 N78-18047
Tests on details and components
p0242 N78-18050
Current standards of fatigue test on strike aircraft
[AGARD-AR-92] p0242 N78-18051
Fatigue load monitoring
p0242 N78-18052
Low cycle fatigue in turbines
[NASA-TM-75264] p0264 N78-19156
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119
Analysis and synthesis of operational loads --- aircraft structures
[ISD-193] p0310 N78-20551
Report on aircraft fatigue studies --- in-flight monitoring and stress measurements
[AD-A049876] p0317 N78-21102
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics --- A-U461, A-U26N T6
[AAAF-NT-77-35] p0403 N78-24587
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
NDI methods on full-scale fatigue tests and their service usage

p0444 N78-26471
Review of aeronautical fatigue investigations in the Netherlands during the period April 1975 to February 1977
[NLR-MP-77005-U] p0494 N78-28494
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminium alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
Development of a load sequence for a structural fatigue test
p0554 N78-30277
Structural fatigue testing
p0554 N78-30279
Current developments in the life of aircraft structure
p0554 N78-30280
Aircraft structural life monitoring and the problem of corrosion
p0554 N78-30281
NDI and the detection of fatigue
p0554 N78-30282
The development of the theory of structural fatigue
p0555 N78-30283

FAULT MECHANICS
U FRACTURE MECHANICS

FEASIBILITY ANALYSIS
Feasibility of modern airships - Preliminary assessment
p0050 A78-13416
Technical, economic and operational aspects of an FAA engineering study and feasibility determination for a ground-based warm fog dispersal system
p0056 A78-14993
Comments on 'Feasibility study of a hybrid airship operating in ground effect'
p0188 A78-24367
Assessment of processing methods for titanium alloys for aircraft structures
p0221 A78-26040
The F-4E Austere HUD/Gunsight project
p0380 A78-38746
Feasibility analysis for a microwave deicer for helicopter rotor blades
[AD-A042581] p0022 N78-10052
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
Feasibility study of negative lift circumferential type seal for helicopter transmissions
[NASA-CR-135302] p0212 N78-17390
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089

FEDERAL REPUBLIC OF GERMANY
U GERMANY

FEEDBACK CONTROL
NT CASCADE CONTROL
Application of near-optimal differential game feedback strategies to aircraft weapon delivery maneuvers
p0063 A78-15628
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672
Design of multivariable PID controllers with application to a gas-turbine --- Proportional Integral Derivative
p0072 A78-16308
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
Determination of flight-tracking controllers using Solheim's pole-shifting method --- for HFB-320 airbus
p0074 A78-16415
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- applied to STOL autopilot design
p0114 A78-18464
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- application to Augmentor Wing Jet STOL Research Aircraft flare control autopilot design
p0184 A78-23917
Failure detection and correction for turbofan engines
p0184 A78-23918
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
Output feedback regulator design for jet engine control systems
p0215 A78-24898
One axis artificial feel system --- pilot proprioceptive cue forces on aircraft joy stick
p0224 A78-26488
Sensitivity reduction in aircraft control systems
p0285 A78-31034
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
Digital control law synthesis in the w prime domain
p0507 A78-46962
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Improving the accuracy of HUD approaches in windshear with a new control law
[AIAA PAPER 78-1494] p0515 A78-47935
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Eigenvalue/eigenvector assignment using output feedback
[NASA-TP-1118] p0251 N78-18823
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
Open loop gust alleviation --- exemplified for DO-28 aircraft
[BMFT-FB-W-77-22] p0353 N78-22114
Inherent errors in asynchronous digital flight controls
[AD-A055649] p0565 N78-31124
Closed loop control systems. Part 1: Aircraft. A bibliography with abstracts
[NTIS/PS-78/0809/0] p0630 N78-33122
Closed loop control systems. Part 2: Miscellaneous applications. A bibliography with abstracts
[NTIS/PS-78/0810/8] p0632 N78-33278

FELLOWSHIP AIRCRAFT
U F-28 TRANSPORT AIRCRAFT

FERROCENES
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079

FFT
U FAST FOURIER TRANSFORMATIONS

FIBER OPTICS
An airplane fiber optic multiplex data bus design and feasibility demonstration system

[AIAA 77-1475] p0005 A78-12232
A-7 ALOFT demonstration and economic analysis --- fiber optics interface for navigation and weapons delivery
p0054 A78-14939
Aircraft R-Nav system connected on optical bus
p0054 A78-14941
Fiber optic data buses for avionics - A systems view
p0066 A78-15656
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349
Fiber optic development for tactical fighter applications
p0534 A78-49906
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
An optical fibre, multi-terminal data system for aircraft
p0202 N78-16849
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
Fiber optics, volume 2. Citations from the NTIS data base
[NTIS/PS-78/0713/4] p0636 N78-33918
FIBER STRENGTH
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
FIBERGLASS
U GLASS FIBERS
FIBERS
NT CARBON FIBERS
NT GLASS FIBERS
NT METAL FIBERS
NT REINFORCING FIBERS
NT SYNTHETIC FIBERS
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
FIBROUS MATERIALS
U FIBERS
FIDELITY
U ACCURACY
FIELD STRENGTH
NT MAGNETIC FLUX
FIGHTER AIRCRAFT
NT ALPHA JET AIRCRAFT
NT F-4 AIRCRAFT
NT F-5 AIRCRAFT
NT F-8 AIRCRAFT
NT F-14 AIRCRAFT
NT F-15 AIRCRAFT
NT F-17 AIRCRAFT
NT F-18 AIRCRAFT
NT F-27 AIRCRAFT
NT F-100 AIRCRAFT
NT F-101 AIRCRAFT
NT F-102 AIRCRAFT
NT F-106 AIRCRAFT
NT F-111 AIRCRAFT
NT FV-12A AIRCRAFT
NT HARRIER AIRCRAFT
NT JAGUAR AIRCRAFT
NT P-1127 AIRCRAFT
NT SAAB 37 AIRCRAFT
NT YF-12 AIRCRAFT
NT YF-16 AIRCRAFT
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
Design considerations for ECM systems in attack and fighter aircraft
p0054 A78-14928
Integrated flight trajectory control
p0061 A78-15563
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses --- for Kfir aircraft
p0071 A78-16181
Clearance of new stores for military aircraft - An overview of the techniques used
p0074 A78-16597
Advanced design composite aircraft program
p0077 A78-16919
Design considerations in formulating V/STOL lift plus lift/cruise supersonic fighter concepts
p0109 A78-17878
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
Flight test of combat aircraft loads and dynamic behavior encountering aircraft trailing vortices
p0125 A78-19443
Fighters for the 1990s - Building on today's technology
p0130 A78-20188
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
Impact of engine cycle parameters on V/STOL Type A configuration and commonality
[SAE PAPER 770980] p0179 A78-23821
Sensitivity studies for several high performance VSTOL concepts
[SAE PAPER 770982] p0180 A78-23822
The impact of emerging technologies on tactical V/STOL airplane design and utility
[SAE PAPER 770985] p0180 A78-23824
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0282 A78-30259
Fire power --- fighter aircraft target acquisition and tracking radar
p0288 A78-31425
Going for a spin - Fighter style
p0288 A78-31745
Mirage 2000 --- French fighter aircraft design characteristics, SNECMA M53 engine and avionics
p0288 A78-31755
The Dual-Flight-Simulator on the evaluation of air combat effectiveness
[DGLR PAPER 77-080] p0290 A78-31948
Interavia combat aircraft design analysis. I - Dassault-Breguet Mirage 2000
p0328 A78-32850
Dornier LSK - Light combat aircraft with hover capability for anti-tank missions and shipboard deployment
p0336 A78-34822
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
The ABEILLE electronic scanning antenna --- for fighter aircraft fire control radar
p0338 A78-35050
The design of future cockpits for high performance fighter aircraft
p0370 A78-36446
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
The Air Combat Maneuvering Range/Instrumentation system
p0425 A78-42513
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
Su-19 Fencer
p0481 A78-46494
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
A technique for the assessment of fighter aircraft precision controllability

[AIAA 78-1364] p0484 A78-46553
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0484 A78-46559
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data
[AIAA 78-1373] p0485 A78-46561
Air-to-air combat simulation
p0510 A78-47868
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
Studies of aerodynamic technology for VSTOL fighter/attack aircraft
[AIAA PAPER 78-1511] p0516 A78-47946
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496
Mirage 2000 - Dassault's better delta
p0523 A78-49169
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
Fiber optic development for tactical fighter applications
p0534 A78-49906
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
Analysis of advanced variable camber concepts for combat aircraft
p0592 A78-52592
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
Effect of fighter attack spectrum on crack growth
[AD-A042369] p0037 N78-11054
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
High acceleration cockpit simulator evaluation
[AD-A045165] p0100 N78-13081
Increasing the survivability of combat aircraft
[AD-A045910] p0140 N78-14038
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations --- crack propagation in fighter aircraft
[AD-A042785] p0206 N78-17044
Fatigue design of fighters: Guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft
[AGARD-AG-231] p0241 N78-18046
Fatigue design of fighters; guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft: General survey
p0241 N78-18047
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Multi-variate optimization problems of flight vehicle synthesis
[PB-276123/7] p0318 N78-21103
Multiband antenna system for tactical aircraft
[AD-A049699] p0325 N78-21363
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
Flight control system design for ride qualities of highly maneuverable fighter aircraft
p0431 N78-26054
Design considerations for a ground avoidance monitor for fighter aircraft
p0432 N78-26058
YF-17 full scale minimum drag prediction
p0436 N78-26091
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter model employing a strake-wing concept
[NASA-TM-74071] p0437 N78-26103
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
Evaluation of F-16 radar attachment assemblies for reusable containers
[AD-A053424] p0459 N78-27432
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
Fighter aircraft design --- conferences
[AGARD-CP-241] p0549 N78-30099
Advanced control concepts for future fighter aircraft
p0549 N78-30104
Aerodynamics of the new generation of combat aircraft with delta wings
p0549 N78-30106
Supercruiser fighter analysis
p0549 N78-30107
Analysis of advanced variable camber concepts
p0549 N78-30108
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109
Intake design for fighter aircraft
p0549 N78-30110
Advance nozzle technology
p0550 N78-30111
Impact of active control on structures design
p0550 N78-30113
New structures made of composite materials for high performance combat aircraft
p0550 N78-30114
Metal technology for future aircraft design
p0550 N78-30115
Display systems and cockpit design
p0550 N78-30116
Application techniques for digital flight control systems
p0550 N78-30117
The design of a high g cockpit
p0550 N78-30118
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report
[AD-A054016] p0550 N78-30119
The terrain following task for the advanced tactical fighter using discrete optimal control
[AD-A055196] p0565 N78-31121
Encyclopedia of US Air Force aircraft and missile systems. Volume 1: Post-World War II fighters 1945 - 1973

[AD-A057002] p0622 N78-33036
FIGURE OF MERIT
Operational regularity in air transport
p0525 A78-49449
FILAMENT WINDING
Filament-winding fabrication of QCSEE configuration fan blades
[NASA-CR-135332] p0198 N78-16052
FILAMENT WOUND CONSTRUCTION
U FILAMENT WINDING
FILM COOLING
Account of mainstream turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 77-HT-10] p0106 A78-17483
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes --- for high temperature gas turbine blades
p0573 A78-50578
Near-hole region heat transfer in full-coverage film cooling --- for high temperature gas turbines
p0573 A78-50579
Film cooling of a gas turbine blade
p0573 A78-50580
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling performance
p0573 A78-50582
Experimental verification of a blade cooling system and comparison with design calculation --- in high temperature test turbine
p0573 A78-50583
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
Investigation on temperature distribution near film cooled airfoils
p0320 N78-21127
Erosion prevention and film cooling on vanes
p0320 N78-21128
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
The influence of coolant turbulence intensity on film cooling effectiveness
p0321 N78-21136
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
A computer program for full-coverage film-cooled blading analysis including the effects of a thermal barrier coating
[NASA-TM-78951] p0454 N78-27126
FILTERING
U FILTRATION
FILTRATION
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
FINANCIAL MANAGEMENT
The next commercial jet transport: The need, economics, technology, and financing; Air Transportation Research International Forum, San Francisco, Calif., May 9, 1977, Papers
p0057 A78-15084
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
FINE STRUCTURE
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
FINISHES
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188
FINITE DIFFERENCE THEORY
Computation of transonic potential flows in turbomachinery
p0011 A78-12293
Finite difference procedure for unsteady transonic flows - A review
p0011 A78-12294
Comparison of a finite difference method with a time-marching method for blade to blade transonic flow calculations
p0011 A78-12295
Finite-difference calculations of three-dimensional transonic flow through a compressor blade row, using the small-disturbance nonlinear potential equations
p0011 A78-12298
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
Recent developments in numerical solutions for equations of the boundary layer in laminar and turbulent flow
p0118 A78-19030
Numerical study of transonic profiles
p0120 A78-19061
THREDE - A free-field EMP coupling and scattering code --- electromagnetic scattering from aircraft
p0126 A78-19580
Calculation of the flow past a vibrating airfoil section in transonic gas flow
p0127 A78-19669
Solution of the problem of three-dimensional flow past a delta wing with subsonic edges by a modification of the Lax-Wendroff method
p0128 A78-19696
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
Calculation of the Laval-nozzle flow by a modified Lax-Wendroff method of second-order accuracy
p0166 A78-20970
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185

Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
The supersonic flow past cusped wings
p0230 A78-28056
Numerical methods for structural analysis
p0328 A78-33003
A three-dimensional finite-difference solution of the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124
A new method of nozzle design
p0416 A78-40839
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
Supersonic flow over sharp-edged wings
p0480 A78-46091
Numerical analysis of flow through turbine cascade by the Modified FLIC Method
p0576 A78-50607
Numerical implementation of solid-body boundary conditions for the Euler equations --- in fluid dynamics
p0584 A78-51175
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
Viscous flow simulations in VTOL aerodynamics --- finite difference technique
p0269 N78-19791
Numerical study of transonic flow over oscillating airfoils using the full potential equation
[NASA-TP-1120] p0313 N78-21055
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
Inverse boundary-layer theory and comparison with experiment
[NASA-TP-1208] p0615 N78-32385

FINITE ELEMENT METHOD
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
The evaluation of several finite elements for the calculation of wing structures
p0119 A78-19051
Transmission of a concentrated force to a plate
p0129 A78-19726
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
A superelement technique for designing helicopter fuselages
p0174 A78-22627
A least square finite element technique for transonic flow with shock
[AIAA PAPER 78-328] p0186 A78-24022
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
Numerical methods for structural analysis
p0328 A78-33003
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
Finite-element analysis of three-dimensional potential flow in turbomachines
p0416 A78-40831
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
Superelement method for helicopter fuselage analysis
p0517 A78-48209
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043
Subsonic, inviscid flow by the finite element method
[WRE-TR-1859(W)] p0147 N78-15005
Finite element concepts in computational aerodynamics
p0270 N78-19801
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
Vibrations of a helicopter rotor blade using finite element unconstrained variational formulations
[AD-A052670] p0397 N78-24125
Finite element analysis for complex structures, helicopter transmission housing structural modeling
[AD-A052759] p0397 N78-24126
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
Stress analysis of ceramic turbine blades by finite element method, part 1
[AD-A056310] p0629 N78-33111

FINNED BODIES
Optimization of the design parameters of finned pilotless flight vehicles
p0293 A78-32269
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072

FINS
NT COOLING FINS
NT NOSE FINS
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at

Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
Development of advanced composite structures
p0448 N78-27062
FIRE CONTROL
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
Airborne defensive fire control algorithms
p0063 A78-15627
F-4E austere heads-up display/gunsight evaluation
p0124 A78-19434
F-16 flight test progress report
p0232 A78-28452
The ABEILLE electronic scanning antenna --- for fighter aircraft fire control radar
p0338 A78-35050
Alpha Jet - A great leap forward --- overview of lightweight fighter-bomber
p0470 A78-44617
F-4E fire control system simulator, F-4E austere/heads up display (HUD), SEAFAC programs
[AD-A042255] p0031 N78-10124
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
A discrete-event digital simulation model of the F-16 fire control computer operational flight program using simscript 2.5
[AD-A048164] p0207 N78-17047
F-4E avionics update
[AD-A047949] p0243 N78-18061
A feasibility study of a manual bomb release while in a turn
[AD-A048882] p0261 N78-19123
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083
An extended Kalman filter fire control system against air-to-air missiles, volume 2
[AD-A055637] p0610 N78-32091
FIRE DAMAGE
Airport fires and their causes
p0339 A78-35274
Characterization of secondary ignition sources in unattended compartments and full-scale baseline test --- aircraft safety
[NASA-CR-151573] p0094 N78-13028
FIRE EXTINGUISHERS
Fire fighter tools
[AD-A051687] p0364 N78-23107
FIRE FIGHTING
Survival after a crash
p0072 A78-16280
Fire fighter tools
[AD-A051687] p0364 N78-23107
FIRE POINT
AIC/50/ values for some polymeric materials --- Apparent Lethal Concentration fire toxicity
p0371 A78-36596
FIRE PREVENTION
Pool fire induced cockpit degradation
p0050 A78-13415
The design of aircraft and helicopter protection systems --- Russian book
p0070 A78-15937
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Fire detection devices --- for aircraft cabins
p0175 A78-22900
Antimisting fuel kinematics related to aircraft crash landings
p0230 A78-28147
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
Airport fires and their causes
p0339 A78-35274
Current trends in the aerial application of fire retardants
p0425 A78-42512
Fire testing of flexible hose, tube assemblies, coils, fittings and similar system components
[SAE AS 1055B] p0471 A78-44681
Fire detector response in aircraft applications
p0599 A78-53674
FIREBEE 2 TARGET DRONE AIRCRAFT
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
FIREPROOFING
The relative fire resistance of select thermoplastic materials --- for aircraft interiors
p0480 A78-45475
FIRES
NT FOREST FIRES
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
Fire fighter tools
[AD-A051687] p0364 N78-23107
Overview of safety research
p0497 N78-29054
FIRING (IGNITING)
NT STATIC FIRING
FISHTAILING
U YAW
FITTINGS
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings --- rings and loops, safety belts and one-way load equipment
[DLR-IB-152-75/25] p0044 N78-11204
Evaluation of a lip-seal hydraulic fitting for the F-14 aircraft
[AD-A051159] p0396 N78-24120
FIXED WINGS
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95 --- Langley Unitary Plan wind tunnel tests
[NASA-TM-78706] p0604 N78-32050
A theoretical and experimental study of circulation control with reference to fixed wing applications
[RP-582] p0623 N78-33052
FIXED-WING AIRCRAFT
U AIRCRAFT CONFIGURATIONS
U FIXED WINGS
FLAME FRONTS
U FLAME PROPAGATION
FLAME HOLDERS
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
FLAME INTERACTION
U FLAME PROPAGATION
FLAME PROPAGATION
A case for a new model for turbulent flame propagation
p0229 A78-27840
Antimisting fuel kinematics related to aircraft crash landings
p0230 A78-28147
Review of flashback reported in prevaporizing/premixing combustors
p0377 A78-37772
Time-dependent fire behavior of aircraft cabin materials
[AD-A050923] p0324 N78-21234
FLAME RETARDANTS
Current trends in the aerial application of fire retardants
p0425 A78-42512

Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
FLAME STABILITY
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
Combustion in flow --- Russian book on combustion theory applied to aircraft combustion chambers
p0485 A78-46583
Combustor performance of high availability fuels
p0572 A78-50568
Aircraft afterburner catalytic flame stabilization
p0572 A78-50570
Mechanism of pulsating combustion of the liquid fuel fed to the airflow through the circulation zone behind the flame stabilizer
p0581 A78-50788
Flame stabilization in a ramjet combustion chamber by means of a pilot gas generator
[DLR-FB-77-54] p0564 N78-31117
FLAMES
NT PREMIXED FLAMES
FLAMMABILITY
The relative fire resistance of select thermoplastic materials --- for aircraft interiors
p0480 A78-45475
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0526 A78-49693
Fuel system protection
p0035 N78-11030
Full-scale aircraft crash tests of modified jet fuel
[AD-A043843] p0045 N78-11251
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
Aircraft cargo compartment fire test simulation program
[NASA-CR-151951] p0324 N78-21223
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235
FLAMMABLE GASES
NT LIQUEFIED NATURAL GAS
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064
FLAP CONTROL
U AIRCRAFT CONTROL
U FLAPS (CONTROL SURFACES)
FLAPPING
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
FLAPS (CONTROL SURFACES)
NT EXTERNALLY BLOWN FLAPS
NT JET FLAPS
NT LEADING EDGE SLATS
NT TRAILING-EDGE FLAPS
NT WING FLAPS
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
Asymptotic theory of the onset of separation at a flap on a cooled body situated in hypersonic flow under conditions of weak hypersonic interaction
p0128 A78-19671
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Turbulent boundary layer on a moving surface
p0163 A78-20850
FLARES
Optimal flare in presence of wind shears --- for aircraft in automatic approach
p0385 A78-39186
FLASH POINT
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
FLASHBACK
Review of flashback reported in prevaporizing/premixing combustors
p0377 A78-37772
FLAT COAXIAL TRANSMISSION LINES
U MICROSTRIP TRANSMISSION LINES
FLAT PLATES
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
An analytic study of free molecule flow fields at the front and back edges of a plate
p0274 A78-28972
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
Noise from separated flow of flat plate
p0577 A78-50622
Density of motions in the flutter of infinite plates
p0594 A78-52932
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
Theoretical determination of subsonic oscillatory airforce coefficients
[ARC-R/M-3804] p0359 N78-23067
FLAT SURFACES
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583
FLAW DETECTION
U NONDESTRUCTIVE TESTS
FLEXIBLE BODIES
Search-method optimization of the balancing of flexible rotors of gas turbine engines
p0581 A78-50795
Influence of oil-squeeze-film damping on steady-state response of flexible rotor operating to supercritical speeds
[NASA-TP-1094] p0098 N78-13064
FLEXIBLE WINGS
Why the flexible wing. II --- for glider design
p0176 A78-23058
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
FLIGHT ALTITUDE
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115
Safe air-space requirements above an explosive-ordnance test facility
[MRL-R-711] p0451 N78-27092
FLIGHT CHARACTERISTICS
The development of the first pressurized sailplane
p0075 A78-16598
DFVLR studies on rotary-wing flight mechanics
p0114 A78-18502

Backfire - The bogeyman bomber --- Soviet strategic aircraft
p0116 A78-18699
The interaction between the characteristics of the operational environment and the flight performance of second-generation STOL aircraft - Some preliminary results
p0121 A78-19073
The integrated shielded propeller as a drive system for general aviation aircraft
[DGLR PAPER 77-045] p0190 A78-24434
The Mi-6A helicopter --- Russian book
p0221 A78-26000
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791
Influence of structural components of a by-pass engine on its flight characteristics --- STOL aircraft
p0277 A78-29582
Theory of dolphin-style sailplane flight and the principles of dynamic flight. II
p0278 A78-29672
Helicopters: Calculation of integral aerodynamic performance and air-technical data --- Russian book
p0281 A78-30124
Aerodynamic noise of gliders
p0328 A78-32971
Design for flying --- Book
p0371 A78-36498
Helicopter flight demonstration
p0380 A78-38750
Aircraft flying performance: Principles, flight attitude, flight phases --- German book
p0480 A78-45425
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Flying qualities of an aircraft with strong lateral-directional coupling --- application to space shuttle stability control
[AIAA 78-1361] p0484 A78-46550
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
AIDS in engine management programmes --- Airborne Integrated Data Systems
p0510 A78-47865
Dynamics of the longitudinal motion of an airplane with a variable-geometry wing
p0523 A78-49285
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
Test instrumentation system for flight simulator handling characteristics
[AIAA 78-1595] p0579 A78-50669
Comparison of the characteristics of bypass turbojet engine employing a small-size gas-turbine in the outer duct with those of a turbojet engine in supersonic cruising flight
p0581 A78-50790
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
A comparison of V/STOL handling requirements with the VAK-191B
p0258 N78-19100
MIL-F-83300; view from an aircraft designer
p0258 N78-19101
V/STOL hover stability impact on hover control task
p0258 N78-19102
V/STOL flying qualities requirements in the UK --- control during short takeoff
p0258 N78-19103
Review of US Navy VSTOL handling qualities requirements
p0258 N78-19104
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
A piloted simulation of V/STOL landings aboard a non-aviation ship
p0259 N78-19106
Shipboard testing of the AV-8A Harrier
p0259 N78-19108
Analysis of the influence of the OGE/IGE transition on VAK-191B flying qualities in hover
p0259 N78-19109
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112
Preliminary design of a flight control system for a V/STOL airplane with geared variable pitch fans
p0259 N78-19113
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
Requirements for VLA systems
p0260 N78-19118
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
NAVTOLAND and flying qualities
p0260 N78-19120
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
The Soviet attack helicopter
[AD-A050649] p0349 N78-22080
Pilot evaluation of sailplane handling qualities
[NASA-CR-2960] p0360 N78-23081
Performance Prediction Methods
[AGARD-CP-242] p0434 N78-26074
Analysis of error sources in predicted flight performance
p0435 N78-26087
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
FLIGHT COMPUTERS
U AIRBORNE/SPACEBORNE COMPUTERS
FLIGHT CONDITIONS
Modeling of Air Data Computers in test system software
p0065 A78-15650
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
Landing aircraft under poor conditions
p0525 A78-49549
Investigation of a discrete C-Star transient response controller for the YF-16 at a selected flight condition
[AD-A053441] p0456 N78-27139
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
FLIGHT CONTROL
NT AUTOMATIC FLIGHT CONTROL
NT AUTOMATIC LANDING CONTROL
NT FLY BY WIRE CONTROL
NT POINTING CONTROL SYSTEMS
NT THRUST VECTOR CONTROL
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Integrated flight trajectory control
p0061 A78-15563
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565

YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
Flight-control/navigation inertial reference system
p0065 A78-15642
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
Electric flight control systems - Applicable now
p0067 A78-15688
Primary flight control actuation with electric motors
p0067 A78-15689
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
F-16's ISAs reduce cost, weight, and leakage --- hydraulic integrated servoactuators for flight control
p0108 A78-17737
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
Sensor failure detection using analytical redundancy
p0182 A78-23862
B-1 terrain following development
p0233 A78-28456
YC-14 flight test program
p0233 A78-28458
Fault tolerant flight controls
p0274 A78-28900
The helicopter as a control object --- Russian book
p0276 A78-29401
The determination of margins of safety for critical aircraft systems --- electromagnetic interference effects on flight and engine controls
p0384 A78-39082
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
Modeling and parameter uncertainties for aircraft flight control system design
[AIAA 78-1371] p0484 A78-46558
Constant-control rolling maneuver
p0507 A78-46961
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
Optimization techniques for air traffic control problems --- Russian book
p0522 A78-48504
Design of a horizontal tail unit and related adjustments
p0527 A78-49736
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
A qualitative analysis of redundant asynchronous operation
p0531 A78-49863
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
Bank-to-turn /BIT/ autopilot technology --- for missiles
p0534 A78-49927
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
Assessment of dynamic coordinate alignment for elastic aircraft --- flight control Kalman filter estimates
p0538 A78-49987
Flight controls of Army/Hughes YAH-64 advanced attack helicopter
[AIAA 78-1237] p0540 A78-50160
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
Optimal flight control synthesis via pilot modeling
[AIAA 78-1286] p0541 A78-50193
A learning flight control system for the F8-DFBW aircraft --- Digital Fly-By-Wire
[AIAA 78-1288] p0542 A78-50195
Digital flight control system - Advanced technology of flight control
p0569 A78-50266
Spacecraft flight control systems --- Russian book
p0599 A78-53434
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
An approach guidance system for remotely-piloted vehicles
[AD-A041561] p0022 N78-10043
Stability and control flight test techniques, volume 2 --- pilot training handbook
[AD-A042593] p0030 N78-10113
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Stability and control flight test theory, volume 1
[AD-A042583] p0042 N78-11115
The evaluation of a digital hardware voter/monitor in an aircraft control system
[AD-A043979] p0043 N78-11117
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
Military transport (C-141) fly-by-wire program
[AD-A046163] p0143 N78-14056
Three-cue helicopter flight director evaluation
[AD-A046261] p0143 N78-14058
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
A state-of-the-art assessment of air data sensors for Naval aircraft
[AD-A046500] p0150 N78-15038
Research and development of aircraft control actuation systems. The development of a direct drive fly-by-wire flight control system and evaluation of a force sharing fly-by-wire actuator
[AD-A047283] p0200 N78-16065
Experimental testing of flight control head up displays
[NASA-TM-75205] p0208 N78-17053
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
V/STOL hover stability impact on hover control task
p0258 N78-19102
V/STOL flying qualities requirements in the UK --- control during short takeoff
p0258 N78-19103
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112
Preliminary design of a flight control system for a V/STOL airplane with geared variable pitch fans
p0259 N78-19113
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
NAVTOLAND and flying qualities
p0260 N78-19120
Wind models for flight simulator certification of landing and approach guidance and control systems

p0268 N78-19723
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
Heavy lift helicopter flight control system. Volume 2: Primary flight control system development and feasibility demonstration
[AD-A049580] p0323 N78-21163
Description and theory of operation of the computer by-pass system for the NASA F-8 digital fly-by-wire control system
[NASA-CR-144865] p0349 N78-22076
Heavy lift helicopter flight control system. Volume 1: Production recommendations
[AD-A050618] p0353 N78-22113
Optimum horizontal guidance techniques for aircraft
p0356 N78-23016
An approach to the determination of aircraft handling qualities using pilot transfer functions
p0356 N78-23018
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
Electromechanical flight control actuator, volume 2
[NASA-CR-151734] p0413 N78-25986
Electromechanical flight control actuator, volume 3
[NASA-CR-151735] p0413 N78-25987
Guidance and control design considerations for Low-Altitude and Terminal-Area Flight
[AGARD-CP-240] p0431 N78-26049
Guidance and control for low level offensive aircraft: A Royal Air Force view
p0431 N78-26050
Flight control system design for ride qualities of highly maneuverable fighter aircraft
p0431 N78-26054
System integration and safety monitoring to achieve integrity in low altitude flight control systems
p0432 N78-26059
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
Experimental determination of the navigation error of the 4-D navigation, guidance, and control systems on the NASA B-737 airplane
p0433 N78-26071
Direct lift control for flight path control and gust alleviation
p0434 N78-26072
The effect of landing system coverage and path geometry on lateral position errors at the runway threshold
[NASA-TM-78744] p0451 N78-27100
Investigation of a discrete C-Star transient response controller for the YF-16 at a selected flight condition
[AD-A053441] p0456 N78-27139
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
Boundary separation problems faced by aircraft designers
p0493 N78-28399
Propulsion/flight control integration technology (PROFIT) design analysis status
[NASA-CR-144875] p0501 N78-29101
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102
Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072
Application techniques for digital flight control systems
p0550 N78-30117
A pyramid skewed axis sensor set for multiplex flight control systems
[ARC-R/M-3808] p0553 N78-30143
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120
The terrain following task for the advanced tactical fighter using discrete optimal control
[AD-A055196] p0565 N78-31121
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
Inherent errors in asynchronous digital flight controls
[AD-A055649] p0565 N78-31124
Avionics performance analysis: A historical review and a current assessment of flight instrumentation and control systems in civil aviation
[NASA-CR-145378] p0610 N78-32094
Pitch rate flight control for the F-16 aircraft to improve air-to-air combat
[AD-A055417] p0612 N78-32107
A theoretical and experimental study of circulation control with reference to fixed wing applications
[BP-582] p0623 N78-33052
A learning control system with application to flight systems
p0629 N78-33112
Engineering and development program plan: Advanced Integrated Flight Systems (AIFS)
[AD-A056770] p0630 N78-33119

FLIGHT CREWS
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119

FLIGHT HAZARDS
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
Protection of systems avionics against atmospheric electricity hazards - Lightning and static electricity
p0065 A78-15652
Radiation safety in high-altitude air traffic
p0071 A78-16184
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
Going for a spin - Fighter style
p0288 A78-31745
The airborne detection of low-level wind shear
[AIAA PAPER 78-1495] p0515 A78-47936
NASA's aviation safety research and technology program
p0268 N78-19719
Simulation and analysis of wind shear hazard --- for aircraft landing and takeoff
[NASA-CR-157470] p0504 N78-29699
Bird strikes and aviation safety. A bibliography with abstracts
[NTIS/PS-78/0694/6] p0624 N78-33066

FLIGHT INSTRUMENTS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
NT AUTOMATIC PILOTS
New-generation barometric altimeters
p0053 A78-14086
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
Gyroscopic instruments of orientation and stabilization systems --- Russian book
p0280 A78-29859

Doppler MLS - The UK solution
p0280 A78-29934
General aviation flight instrument displays
p0425 A78-42514
Flight deck display trends
p0510 A78-47899
Aviation control system devices --- Russian book
p0529 A78-49850
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Evaluation of jet 2 inch standby flight instrument system
[AD-A051798] p0361 N78-23087
A review of the literature on electro-optical flight displays
[AD-A053310] p0440 N78-26141
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120
Avionics performance analysis: A historical review and a current assessment of flight instrumentation and control systems in civil aviation
[NASA-CR-145378] p0610 N78-32094

FLIGHT LOAD RECORDERS
The dissection of an aircraft loads spectrum produced by peak-counting accelerometers
[LTR-ST-951] p0202 N78-16391
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads --- 747 aircraft performance
[NASA-CR-135395] p0454 N78-27124
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053

FLIGHT MECHANICS
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
Theory of dolphin-style glider flight and principles of dynamic flight. I
p0231 A78-28195
Drag formula for elongated aircraft noses
p0278 A78-29718
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
Flight mechanics today and tomorrow - Balance and perspectives --- aircraft design, control and dynamics simulation
p0337 A78-34942
Atmospheric Flight Mechanics Conference, Palo Alto, Calif., August 7-9, 1978, Technical Papers
p0482 A78-46526
An introduction to the aerodynamics of flight dynamics
[RAE-TM-AERO-1710] p0152 N78-15057
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041
Prediction of operational combat performance
p0435 N78-26086

FLIGHT OPERATIONS
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900

FLIGHT OPTIMIZATION
Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
The problem of choosing design parameters for unpiloted flight-vehicles --- control configured optimization
p0292 A78-32258
Optimization of the design parameters of finned pilotless flight vehicles
p0293 A78-32269
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270
Aircraft flying performance: Principles, flight attitude, flight phases --- German book
p0480 A78-45425
Optimization of quasi-stationary long distance flights in the case of different directions for conducting the flight according to a model which has been idealized to a large extent --- German thesis
p0589 A78-51749
Optimal control of aircraft powerplant --- Russian book
p0597 A78-53119
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076
The on-board calculation of optimal climbing paths
p0434 N78-26078
Trajectory optimization for some sailplane performance problems
p0560 N78-31083

FLIGHT PATHS
NT GLIDE PATHS
Further improvement of the efficiency of computational procedures in flight operations
p0051 A78-13499
A flight path correlation technique for assessing the impact of turbulence in the atmospheric boundary layer on aircraft during the landing approach
p0055 A78-14961
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Some characteristics of sonic boom propagation in an inhomogeneous atmosphere
p0128 A78-19691
Digital simulation of aircraft flight path dynamics using quaternions
[AIAA PAPER 78-311] p0185 A78-24012
Mission management in the airport vicinity --- digital flight control for terminal maneuvering area
[DGLR PAPER 77-037] p0190 A78-24427
B-1 terrain following development
p0233 A78-28456
More about flight-path-angle transitions in optimal airplane climbs
p0291 A78-32098
Method of calculating the landmark density of aeronautical charts
p0475 A78-45124
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Stochastic properties of conflict frequency at multiple connected air route intersections
p0590 A78-51945
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
The helicopter route selection model (DYNFLITE)
[AD-A045094] p0096 N78-13047
Glide path augmentation with inertial flight path angle
[AD-A046363] p0149 N78-15025
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
Flight-path reconstruction of symmetric nonsteady flights
[NLR-TR-76133-U] p0243 N78-18056
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports

[JTIAS-TN-216] p0403 N78-24755
The on-board calculation of optimal climbing paths p0434 N78-26078
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind p0452 N78-27110
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
Terrain Contour Matching (TERCOM): Sensitivity to heading and ground-speed errors
[AD-A056127] p0609 N78-32084
FLIGHT PERFORMANCE
U FLIGHT CHARACTERISTICS
FLIGHT PLANS
SST flight planning and navigation - The first year's experience p0372 A78-37154
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075
FLIGHT RECORDERS
The status of flight recorders in modern aircraft p0122 A78-19294
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
Non-volatile memory system for severe environment flight recorders p0532 A78-49872
Design and construction of a flight monitor and data recorder --- component selection and software design
[AD-A052405] p0398 N78-24135
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089
FLIGHT RULES
NT INSTRUMENT FLIGHT RULES
NT VISUAL FLIGHT RULES
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071
FLIGHT SAFETY
Analysis of aviation accidents with light planes and helicopters p0053 A78-14084
The design of aircraft and helicopter protection systems --- Russian book p0070 A78-15937
Distribution of reliability characteristics among aircraft units to ensure a given flight-safety level p0174 A78-22639
The collision risk p0175 A78-22851
The Low-Level Wind Shear Alert Program p0187 A78-24346
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
The endangerment of flight safety due to wind shear
[DGLR PAPER 77-033] p0191 A78-24448
Certifying the Learjet to 51,000 feet p0234 A78-28462
Clear air turbulence accidents p0273 A78-28833
Fault tolerant flight controls p0274 A78-28900
How to make an airport unattractive to birds p0275 A78-29209
Systematic analysis of safety in aviation. II p0278 A78-29674
Some test results concerning visibility of obstacle and hazard beacons p0280 A78-29907
By accident or design --- ATC collision avoidance systems p0334 A78-34375
Concerning the logical comparison of ATC separation standard assessment models p0370 A78-36455
Reliability of aviation techniques and flight safety --- Russian book p0371 A78-36494
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
AIDS in engine management programmes --- Airborne Integrated Data Systems p0510 A78-47865
Safety of space flights p0516 A78-47952
Distribution of reliability characteristics among airplane system units to ensure given flight safety level p0518 A78-48221
Aircraft guidance and flight safety - Current and future problems for research and industry p0569 A78-50263
Improved safety in air transportation through the extension and automation of flight safety systems p0569 A78-50264
Airborne equipment for all weather operations p0570 A78-50448
Feasibility of landing at an alternate airport due to visibility conditions p0585 A78-51341
VTOL aircraft dynamics --- Russian book p0598 A78-53428
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
Aviation weather service requirements, 1980 - 1990 p0267 N78-19713
Overview of NASA/Marshall Space Flight Center's program on knowledge of atmospheric processes p0267 N78-19714
NASA's aviation safety research and technology program p0268 N78-19719
Air traffic safety in the airport near range
[TUBS/SFB58/84] p0304 N78-20103
Simulation and development possibilities of the manual control concept in the near range and control zone p0304 N78-20104
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
Flight safety hazards by shear winds
[TUBS/SFB58/62] p0359 N78-23073
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071
System integration and safety monitoring to achieve integrity in low altitude flight control systems p0432 N78-26059
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
Annual review of aircraft accident data, US air carrier operations, 1976
[PB-281329/3] p0624 N78-33065
Vortex advisory system simulation of Chicago O'Hare Airport
[AD-A057112] p0625 N78-33069
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692
FLIGHT SIMULATION
The effect of radar disturbances on aircraft runway arrival time in a four-dimensional navigation terminal approach
[AIAA 77-1512] p0007 A78-12257
Digital real time simulation of the F-5E/F flight director computer
[AIAA 77-1528] p0008 A78-12267
The relationship between simulation and flight test p0062 A78-15586
A flexible approach to on-board computer simulation p0068 A78-15706
Real-time digitally driven graphic-display systems in aircraft simulations p0069 A78-15707
Determination of flight-tracking controllers using Solheim's pole-shifting method --- for HFB-320

airbus
p0074 A78-16415
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
Digital simulation of aircraft flight path dynamics using quaternions
[AIAA PAPER 78-311] p0185 A78-24012
Advanced flight decks for the 80s --- cockpit design for transport aircraft
p0273 A78-28835
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
Use of and experience with simulation in the development of the VFW 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942
Simulation in the development of the training and ground-attack aircraft Alpha Jet
p0289 A78-31943
Digital computer program maneuver pilot
p0290 A78-31946
The Dual-Flight-Simulator on the evaluation of air combat effectiveness
[DGLR PAPER 77-080] p0290 A78-31948
New aspects in the movement simulation of the research flight simulator of DFVLR
[DGLR PAPER 77-086] p0290 A78-31950
Simulation tests of anti-flak profiles --- aircraft flight optimization for ground attack mission
p0290 A78-31951
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Load sequences for laboratory simulation of flight-by-flight stress spectra --- of aircraft structural fatigue
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
Flight mechanics today and tomorrow - Balance and perspectives --- aircraft design, control and dynamics simulation
p0337 A78-34942
Simulation replay - Implementation and flight simulation applications
p0381 A78-38789
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data
[AIAA 78-1373] p0485 A78-46561
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
Piloted flight simulation for active control design development
[AIAA PAPER 78-1553] p0528 A78-49771
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
Subsystem verification of an AFLC organically developed F-15 simulation --- Air Force Logistics Command
p0533 A78-49901
A flight simulation high order language study
p0536 A78-49957
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
Approach guidance logic for a tilt-rotor aircraft
[AIAA 78-1295] p0542 A78-50202
Pilot evaluation of an advanced hingeless rotor XV-15 simulation
[NASA-CR-152034] p0022 N78-10046
The determination of some requirements for a helicopter flight research simulation facility
[NASA-CR-152066] p0030 N78-10117
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
A technique for simulating turbulence for aerospace vehicle flight simulation studies
[NASA-TM-78141] p0079 N78-12014
Microwave landing system utilization and conventional avionics
[AD-A044297] p0083 N78-12055
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
High-altitude area navigation (RNAV) enroute simulation
[AD-A049315] p0257 N78-19088
A piloted simulation of V/STOL landings aboard a non-aviation ship
p0259 N78-19106
Cockpit displayed traffic information study, part 2
[NASA-CR-156115] p0304 N78-20102
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
Evaluation of windshield materials subjected to simulated supersonic flight
[AD-A049981] p0317 N78-21101
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109
Real time digital propulsion system simulation for manned flight simulators
[NASA-TM-78958] p0456 N78-27137
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
Review of aeronautical fatigue investigations in the Netherlands during the period April 1975 to February 1977
[NLR-MP-77005-U] p0494 N78-28494
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminium alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
Simulation study of the oscillatory longitudinal motion of an airplane at the stall
[NASA-TP-1242] p0552 N78-30141
Compilation of test data from an investigation on the effect of environment on crack growth under flight-simulation loading
[NLR-TR-76096-U] p0556 N78-30620
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
Software design for a Visually-Coupled Airborne Systems Simulator (VCASS)
[AD-A055226] p0566 N78-31133
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037

FLIGHT SIMULATORS
NT COCKPIT SIMULATORS
Development of the propulsion simulator - A test tool applicable to V/STOL configurations
[SAE PAPER 770984] p0180 A78-23823
Current problems of flight simulators for research
p0275 A78-29214
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
The HFB 320 airborne simulator of DFVLR as test instrument for determining flight characteristics
[DGLR PAPER 77-082] p0289 A78-31944
Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945
The Dual-Flight-Simulator as an aid for a government mission specialist
[DGLR PAPER 77-079] p0290 A78-31949
Time delay measurements for flight simulators
p0381 A78-38788
The impact of flight simulators on U.S. airlines
p0382 A78-38798
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
Air-to-air combat simulation
p0510 A78-47868
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
Visual flight simulator for the investigation of the learning process during aircraft landing
p0569 A78-50302
Circles, texture, etc. - Alternate approaches to CIG scene detail --- computer image generation for flight simulators
[AIAA 78-1578] p0579 A78-50659
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363 --- visual display training simulator devices
[AIAA 78-1580] p0579 A78-50661
Correlated data bases for the present and future --- aircrew training simulator acquisitions flexibility
[AIAA 78-1583] p0579 A78-50662
Test instrumentation system for flight simulator handling characteristics
[AIAA 78-1595] p0579 A78-50669
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles --- German thesis
p0592 A78-52498
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
Some current problems in simulator design, testing and use
[AD-A043240] p0044 N78-11127
Some factors influencing Air Force simulator training effectiveness
[AD-A043239] p0044 N78-11128
Proceedings of the 1977 Image Conference --- simulating visual perception for flight simulators
[AD-A044582] p0090 N78-12109
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
The generation of motion cues on a six-degrees-of-freedom motion system --- computer program
[VTH-LR-248] p0143 N78-14062
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways, appendixes
[NASA-CR-145281] p0200 N78-16066
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
Instructor pilot's role in simulation training, phase 2
[AD-A047919] p0212 N78-17082
Optimal aircraft simulator development by adaptive random search optimization
p0246 N78-18082
Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] p0246 N78-18083
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
The NAE airborne V/STOL simulator
p0263 N78-19145
Display and speech devices for simulator instructor/operator station applications
[AD-A049247] p0266 N78-19169
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
Wind models for flight simulator certification of landing and approach guidance and control systems
p0268 N78-19723
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
Optimal regulator or conventional? Setup techniques for a model following simulator control system
p0357 N78-23020
Cost-effectiveness of flight simulators for military training. Volume 1: Use and effectiveness of flight simulators
[AD-A052801] p0400 N78-24156
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
Software design for a Visually-Coupled Airborne Systems Simulator (VCASS)
[AD-A055226] p0566 N78-31133
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
Development of a symbology exerciser for display generation and analysis on the visually-coupled airborne systems simulator (VCASS)
[AD-A055464] p0630 N78-33124

FLIGHT STABILITY TESTS
The measurement of performance and stability and control characteristics of a high subsonic jet aircraft in non-steady flight conditions employing high accuracy instrumentation techniques p0074 A78-16596
Flying aeroplanes in buffet p0078 A78-17130
Flight test of combat aircraft loads and dynamic behavior encountering aircraft trailing vortices p0125 A78-19443
Stability and control flight test techniques, volume 2 --- pilot training handbook [AD-A042593] p0030 N78-10113
Determination of dynamic characteristics from flight test data [DLR-PB-77-26] p0141 N78-14044
Flight-determined stability and control coefficients of the F-111A airplane [NASA-TM-72851] p0245 N78-18075
Flight test of stick force stability in attitude-stabilized aircraft [NLR-MP-77015-U] p0246 N78-18080
Determination of dynamic characteristics from flight test data [ESA-TT-434] p0246 N78-18081
Aircraft ride-bumpiness and the design of ride-smoothing systems p0431 N78-26053
FLIGHT STRESS (BIOLOGY)
NT SPACE FLIGHT STRESS
FLIGHT TECHNICAL ERROR
U PILOT ERROR
FLIGHT TEST VEHICLES
Drones for aerodynamic and structural testing /DAST/ - A status report [AIAA PAPER 78-1485] p0514 A78-47929
FLIGHT TESTS
NT FLIGHT STABILITY TESTS
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data --- Failure Detection and Identification for Digital Fly-By-Wire control [AIAA 77-1506] p0007 A78-12252
Flight experience with a fail-operational digital fly-by-wire control system [AIAA 77-1507] p0007 A78-12253
Adaptive control laws for F-8 flight test p0013 A78-12358
Flight testing of radars p0054 A78-14933
Test pilot report on the angle rate bombing system p0055 A78-14946
The relationship between simulation and flight test p0062 A78-15586
AN/ARN-101 test and evaluation --- data management techniques for Digital Modular Avionics System p0065 A78-15644
Computerized test set for the Air Combat Maneuvering Instrumentation p0068 A78-15700
A Flight Line Computer Loader/Test Controller for improved avionic maintenance p0068 A78-15701
Flight measurement of aircraft onboard antennas p0115 A78-18504
Recent flight test results using an electronic display format on the NASA B-737 p0117 A78-18800
F-16 progress in performance flight testing using an inertial navigation unit p0123 A78-19427
Getting ready for V/STOL T&E in the 80's --- Test and Evaluation for subsonic and supersonic options p0123 A78-19431
Flight-test measurements of ground effect - STOL airplanes p0123 A78-19433
F-4E austere heads-up display/gunsight evaluation p0124 A78-19434
Development of an on-board minicomputer system p0124 A78-19435
Wright-Patterson Air Force Base laser tracker p0124 A78-19437
A new analysis method for determination of FAA stall speed p0124 A78-19440
Flyover noise - Measurement and analysis p0124 A78-19441
The PIO problem - Theory and implications to flight test --- Pilot-Induced Oscillation p0125 A78-19442
The fighter control configured vehicle /CCV/ program development and flight test summary p0125 A78-19444
YC-15 STOL performance flight test methods p0125 A78-19445
B-1 progress report p0125 A78-19446
B-1 terrain following p0125 A78-19447
Sikorsky YUH-60A UTTAS helicopter flight test program p0125 A78-19449
Reynolds number criticality in dynamic tests [AIAA PAPER 78-166] p0160 A78-20718
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft [AIAA PAPER 78-242] p0162 A78-20765
Testing a modern strike aircraft navigation system p0175 A78-22852
XV-15 tilt rotor test - Progress report [SAE PAPER 770953] p0179 A78-23804
Flutter tests of the mated 747 Shuttle Carrier Aircraft-Orbiter [SAE PAPER 770971] p0179 A78-23816
Flight testing an 8000 psi Lightweight Hydraulic System [SAE PAPER 771007] p0181 A78-23839
Flight on 0.33 horsepower - The Gossamer Condor [AIAA PAPER 78-308] p0184 A78-24009
An analysis of the aircraft trailing vortex system [AIAA PAPER 78-312] p0185 A78-24013
New methods for flight vibration studies --- using Fourier analysis [DGLR PAPER 77-050] p0191 A78-24439
Ride quality flight testing p0226 A78-26795
1977 report to the aerospace profession; Proceedings of the Twenty-first Symposium, Beverly Hills, Calif., October 12-15, 1977 p0232 A78-28451
F-16 flight test progress report p0232 A78-28452
F-15/16 canopy off testing p0233 A78-28453
YAV-8B/AV-8B advanced Harrier program p0233 A78-28455
B-1 terrain following development p0233 A78-28456
YC-15 development and test highlights - Phase III p0233 A78-28457
YC-14 flight test program p0233 A78-28458
YC-14B prototype testing p0233 A78-28459
Tri-Gull amphibian development p0233 A78-28460
UTTAS testing p0233 A78-28461
Certifying the Learjet to 51,000 feet p0234 A78-28462
Shuttle carrier aircraft flight tests p0234 A78-28464
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data p0280 A78-29906
Benefits of strapdown over gimbal INS systems for aircraft application p0282 A78-30253
Performance of the ARAVA aircraft with wing-tip winglets p0282 A78-30256
Analytical and experimental fatigue program for the Kfir main and nose landing gears p0282 A78-30259
Flight tests of digital data transmission --- MSK - a quadrature PSK system p0285 A78-31050
The HFB 320 airborne simulator of DFVLR as test instrument for determining flight characteristics [DGLR PAPER 77-082] p0289 A78-31944
An engine nozzle vibration phenomenon encountered in B-1 flight tests p0292 A78-32129
Supersonic aerothermal testing - A new requirement [AIAA 78-773] p0294 A78-32333

The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
A new propeller for agricultural aircraft
p0327 A78-32645
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
Flight evaluation of helicopter rotor isolation system
p0331 A78-33445
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
The certification of light aircraft
p0369 A78-36280
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
The F-4E Austere HUD/Gunsight project
p0380 A78-38746
F-5E/F spin avoidance testing
p0380 A78-38747
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
Aerodynamics of slender lifting surface in accelerated flight
p0416 A78-40836
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592
VALT parameter identification flight test --- VTOL Approach and Landing Technology
p0480 A78-45439
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349
B-1 flight test progress report
[AIAA PAPER 78-1448] p0511 A78-47903
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
The role of the computer in the flight testing of general aviation aircraft
[AIAA PAPER 78-1465] p0512 A78-47914
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
Navstar GPS field test results
p0530 A78-49856
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
Captive carriage vibration of air-to-air missiles on fighter aircraft --- F-15 flight measurements
p0587 A78-51470
Light airplane crash tests at impact velocities of 13 and 27 m/sec
[NASA-TP-1042] p0020 N78-10034
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
AWLS operational flight test
[AD-A043814] p0037 N78-11050
Stability and control flight test theory, volume 1
[AD-A042583] p0042 N78-11115
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-144984] p0044 N78-11199
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
Vortex attenuation flight experiments
p0081 N78-12028
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079
Phugoid characteristics of a YF-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
[NASA-TM-78439] p0095 N78-13037
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process specifications
[AD-A046279] p0149 N78-15032
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055
Evaluation of slimpack style parachute in CT4A airtrainer aircraft
[AD-A047083] p0195 N78-16024
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Flight-path reconstruction of symmetric nonsteady flights
[NLR-TR-76133-U] p0243 N78-18056
Improvement of flight measuring data with a Kalman filter
[BMVG-FBWT-77-6] p0243 N78-18057
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle

p0263 N78-19144
Hydraulic constant recoil program
[AD-A049313] p0267 N78-19517
Research on various aspects of atmospheric flight
[AD-A033681] p0302 N78-20088
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Vortex breakdown. Some observations in flight on the HP 115 aircraft
[ARC-R/M-3805] p0359 N78-23068
Flight experiments to improve terminal area operations
[NASA-TM-78685] p0359 N78-23070
A technique for monitoring flight-test envelope expansion
[AD-A051163] p0361 N78-23083
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Recent flight test results using an electronic display format on the NASA B-737
p0432 N78-26063
Comparison of estimated and flight data for rolling take-off and transition of a VTOL aircraft
p0435 N78-26083
Development of techniques and correlation of results to accurately establish the lift/drag characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
Flight test verification of F-15 performance predictions
p0436 N78-26090
Correlation of wind-tunnel and flight-test data for the Lockheed L-1011 Tristar airplane
p0436 N78-26094
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105
Is production of the CH-53E helicopter warranted
[PB-278815/6] p0453 N78-27116
TRSB microwave landing system demonstration program at Dakar, Senegal
[AD-A054645] p0489 N78-28073
TRSB microwave landing system demonstration program at Nairobi, Kenya
[AD-A054646] p0489 N78-28074
Flight experiments to improve terminal area operations
p0497 N78-29058
Heavy lift helicopter - advanced technology component program - rotor blade
[AD-A053423] p0499 N78-29089
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
Compilation of test data from an investigation on the effect of environment on crack growth under flight-simulation loading
[NLR-TR-76096-U] p0556 N78-30620
TRSB microwave landing system demonstration program at Kristiansand, Norway
[AD-A055317] p0559 N78-31071
TRSB microwave landing system demonstration program at Charleroi, Belgium
[AD-A055920] p0559 N78-31072
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface --- YF-12A ventral fins
p0605 N78-32058
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0 --- supersonic heat transfer and skin friction
p0606 N78-32065
Strapdown system redundancy management flight demonstration --- vertical takeoff and landing aircraft
[NASA-CR-145356] p0608 N78-32079
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055
TRSB microwave landing system demonstration program at Shiraz, Iran
[AD-A055526] p0625 N78-33071
Bell UH-1H RAM/LOG report
[AD-A057231] p0626 N78-33091
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118

FLIGHT TIME
The impact of flight simulators on U.S. airlines
p0382 A78-38798
Strategic or tactical air traffic control
p0570 A78-50447
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119

FLIGHT TRAINING
Stability and control flight test techniques, volume 2 --- pilot training handbook
[AD-A042593] p0030 N78-10113
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
Some factors influencing Air Force simulator training effectiveness
[AD-A043239] p0044 N78-11128
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061

Instructor pilot's role in simulation training, phase 2
[AD-A047919] p0212 N78-17082
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
Display and speech devices for simulator instructor/operator station applications
[AD-A049247] p0266 N78-19169
Antitorque training: Evaluation of effectiveness in reducing mishap losses
[AD-A055040] p0561 N78-31092

FLIGHT VEHICLES
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed sensors --- German book
p0228 A78-27383
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270
Optimization techniques for air traffic control problems --- Russian book
p0522 A78-48504
Methodology questions involved in systems engineering for devising an optimum radio-engineering system for trajectory measurements --- of space vehicles
p0598 A78-53253
Antenna fairings for flight vehicles /2nd revised and enlarged edition/ --- Russian book
p0598 A78-53426
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504

FLIR DETECTORS
Autothreshold autoscreener/FLIR system --- airborne target screener/Forward-Looking Infrared imaging system
p0538 A78-49984

FLOODS
Nansen-Drift Station Project: Remote sea-ice runway construction
[AD-A054720] p0503 N78-29113

FLOW CHARACTERISTICS
NT BOUNDARY LAYER STABILITY
NT FLAME STABILITY
NT FLOW DISTRIBUTION
NT FLOW STABILITY
NT FLOW VELOCITY
NT MAGNETOHYDRODYNAMIC STABILITY
Calculation of the mean flow characteristics at the inlet to the air intake located under a delta wing
p0165 A78-20895
The low-speed air tunnel of the Institute of Hydromechanics at the University of Karlsruhe
p0176 A78-23297
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
Cross-flow characteristics on a cylindrical body at incidence in subsonic flow
p0373 A78-37406
Investigation of flow in centrifugal impeller with tandum inducer
p0577 A78-50614
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19048
An experimental investigation of oscillating flows over an airfoil --- rotary wings
p0299 N78-20058
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
USB flow characteristics related to noise generation
p0391 N78-24060
Characteristics of USB noise
p0391 N78-24061
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050
Hypersonic flows
p0613 N78-32124

FLOW COEFFICIENTS
NT DISCHARGE COEFFICIENT

FLOW DEFLECTION
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853

FLOW DISTORTION
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Wake cutting experiments --- turbulent wake-blade (airfoil) interaction
p0336 A78-34843
Inlet flow distortions in axial flow compressors
p0419 A78-41508
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Distortion of a flat jet in a bounded cross-stream in the presence of a wake space
p0580 A78-50779
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443
Amplification of distortions in an axial compressor stage
p0046 N78-11983
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130

F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131

FLOW DISTRIBUTION
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
Improvements in the calculation of the centrifugal compressor flow by experimental study of the complex rotor flow
[DGLR PAPER 77-062] p0117 A78-18707
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
Flowfield and pressure field of a model propeller
p0191 A78-24451
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
Decay and modification of trailing vortex
p0230 A78-27908
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
Minimisation of relaxation drag
p0374 A78-37423
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Aircraft operating environments around high speed ships --- RPV feasibility for hydrofoil ships
[AIAA PAPER 78-1184] p0422 A78-41877
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
The influence of V/STOL vehicle configuration variables on vectored jet induced flow fields in ground effect
[AIAA PAPER 78-1021] p0465 A78-43555
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
Generalized area rules and integral theorems for hypersonic wing-bodies
p0571 A78-50461
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes --- for high temperature gas turbine blades
p0573 A78-50578
Numerical implementation of solid-body boundary conditions for the Euler equations --- in fluid dynamics
p0584 A78-51175
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
A distributed vortex method for computing the vortex field of a missile
[NASA-TP-1183] p0405 N78-25058
Evaluation of a method for the predicton of jet-airframe interference
[NLR-TR-76132-U] p0438 N78-26111
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
New model upwind distributions and their influence on the design of gliders
[DLR-IB-151-76/12] p0488 N78-28062
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
Mixing and combustion in high speed air flows --- combustor design
[AD-A054398] p0503 N78-29188
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control --- Lewis 10 by 10 ft supersonic wind tunnel tests
p0605 N78-32062
A theoretical and experimental study of circulation control with reference to fixed wing applications
[RP-582] p0623 N78-33052

FLOW EQUATIONS
NT VON KARMAN EQUATION
NT VORTICITY EQUATIONS
An analytic study of free molecule flow fields at the front and back edges of a plate
p0274 A78-28972
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
Calculation of transonic flow through a turbine cascade by the time-step method
p0379 A78-38248
The calculation of transonic flow over three-dimensional swept wings using the exact potential equation
p0477 A78-45232
Integral equation formulation for transonic flow past lifting wings
p0571 A78-50459
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
Conservative implicit schemes for the full potential equation applied to transonic flows
[NASA-TM-78469] p0271 N78-19868

Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
FLOW FIELDS
U FLOW DISTRIBUTION
FLOW GEOMETRY
The computation of self-similar three-dimensional separated flows
p0127 A78-19657
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow
p0582 A78-50797
Three-dimensional boundary layer theory using shell geometrical concepts
p0584 A78-51176
Critical issues in viscous flow computations
p0270 N78-19792
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
Wind-tunnel investigation of effects of trailing-edge geometry on a NASA supercritical airfoil section
[NASA-TM-X-2336] p0450 N78-27079
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
FLOW MEASUREMENT
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
Comparison of prediction of transonic flow in a fan with flow measurements taken using a laser Doppler velocimeter
p0012 A78-12314
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
Tunnel interference assessment by boundary measurements
p0284 A78-30689
Some measurements in two-dimensional turbulent wakes
p0289 A78-31836
A technique for vorticity measurement in unsteady flow
[AIAA 78-801] p0295 A78-32356
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
Boundary layers in axisymmetric inlets at angle of attack. I - Measurements
[AIAA PAPER 78-1109] p0522 A78-48499
Flow measurements behind a rotor operating in a boundary layer
[AD-A046359] p0148 N78-15012
FLOW PATTERNS
U FLOW DISTRIBUTION
FLOW RATE
U FLOW VELOCITY
FLOW REGULATORS
NT FUEL FLOW REGULATORS
FLOW RESISTANCE
NT AERODYNAMIC DRAG
NT FRICTION DRAG
NT SUPERSONIC DRAG
NT VISCOUS DRAG
Calculation of the induction of wind tunnels
p0132 A78-20277
FLOW SEPARATION
U BOUNDARY LAYER SEPARATION
U SEPARATED FLOW
FLOW STABILITY
NT BOUNDARY LAYER STABILITY
NT FLAME STABILITY
NT MAGNETOHYDRODYNAMIC STABILITY
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
Stability of subsonic gasdynamic flows
p0274 A78-28959
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
FLOW THEORY
Small perturbation expansions in unsteady aerofoil theory
p0074 A78-16401
Uniqueness theorem for an integral equation of a rectangular thin-section wing
p0130 A78-20201
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
Investigations of the transonic flow around oscillating airfoils --- Thesis
p0383 A78-38978
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
FLOW VELOCITY
Comparison of prediction of transonic flow in a fan with flow measurements taken using a laser Doppler velocimeter
p0012 A78-12314
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
Computation of inductive velocity in the plane of a lightly loaded lifting propeller
p0127 A78-19658
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
Velocity profiles in the Laval nozzle throat for uniform compressible swirling flow
p0165 A78-20905
Driver gas contamination in a high-enthalpy reflected shock tunnel
p0223 A78-26235
Laser velocimeter for wind tunnel measurements
p0378 A78-37979
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
Irrotational flow around a spherical segment --- aerodynamic brakes application
p0588 A78-51688
Experiments on the laminar flow in a rectangular streamwise corner

p0600 A78-53765
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058
The YF-12 gust velocity measuring system
p0605 N78-32061

FLOW VISUALIZATION
NT NUMERICAL FLOW VISUALIZATION
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
Flow in a hydraulic model of an axial turbomachine
[ONERA, TP NO. 1977-157] p0075 A78-16619
An investigation of strut-wall intersection losses
[AIAA PAPER 78-205] p0161 A78-20743
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
Study of gas flows with shearing interferometers
p0327 A78-32622
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845
Development of the can-type gas turbine combustors
p0574 A78-50590
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
An experimental investigation of oscillating flows over an airfoil --- rotary wings
p0299 N78-20058
Vortex breakdown. Some observations in flight on the HP 115 aircraft
[ARC-R/M-3805] p0359 N78-23068
Flow visualization, volume 1. A bibliography with abstracts
[NTIS/PS-78/0425/5] p0458 N78-27379
Flow visualization, volume 2. A bibliography with abstracts
[NTIS/PS-78/0426/3] p0459 N78-27380
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048

FLOWMETERS
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298

FLUID AMPLIFICATION
U FLUID AMPLIFIERS

FLUID AMPLIFIERS
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893

FLUID BOUNDARIES
NT GAS-SOLID INTERFACES
Boundary layers in dissipative media
p0170 A78-22091
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
Numerical implementation of solid-body boundary conditions for the Euler equations --- in fluid dynamics
p0584 A78-51175
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006

FLUID DYNAMICS
NT AERODYNAMICS
NT AEROTHERMODYNAMICS
NT GAS DYNAMICS
NT HYDRODYNAMICS
NT RAREFIED GAS DYNAMICS
NT ROTOR AERODYNAMICS
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
Thirty years of fluid dynamics
p0585 A78-51280
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009
A cascade in unsteady flow
[AD-A045319] p0091 N78-12381
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist --- computer systems design
p0269 N78-19789
Technical evaluation report on the Fluid Dynamics Panel Symposium on Prediction of Aerodynamic Loading
[AGARD-AR-125] p0608 N78-32074
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392

FLUID FILMS
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DET-33] p0135 A78-20598
Squeeze film damper characteristics for gas turbine engines
[ASME PAPER 77-DET-23] p0226 A78-26796
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791

FLUID FILTERS
NT AIR FILTERS
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523
Comparison tests on the 100-GPM electrokinetic fuel decontaminator and a 100-GPM military standard filter/separator
[AD-A048655] p0248 N78-18226

FLUID FLOW
NT AIR CURRENTS
NT AIR FLOW
NT AIR JETS
NT ANNULAR FLOW
NT AXIAL FLOW
NT AXISYMMETRIC FLOW
NT BASE FLOW
NT BLASIUS FLOW
NT BOUNDARY LAYER FLOW
NT BOUNDARY LAYER SEPARATION
NT CASCADE FLOW
NT CAVITATION FLOW
NT CHANNEL FLOW
NT COMBUSTIBLE FLOW
NT COMPRESSIBLE FLOW
NT CONICAL FLOW
NT CONVECTIVE FLOW
NT CORNER FLOW
NT CROSS FLOW
NT DUCTED FLOW
NT EQUILIBRIUM FLOW
NT FREE FLOW
NT FREE MOLECULAR FLOW
NT FUEL FLOW
NT GAS FLOW
NT HYPERSONIC FLOW
NT INCOMPRESSIBLE FLOW
NT INLET FLOW
NT INVISCID FLOW
NT JET FLOW
NT JET MIXING FLOW
NT LAMINAR FLOW
NT MASS FLOW
NT MERIDIONAL FLOW
NT MOLECULAR FLOW
NT MULTIPHASE FLOW
NT NONEQUILIBRIUM FLOW
NT NONNEWTONIAN FLOW
NT NONUNIFORM FLOW
NT NOZZLE FLOW
NT OSCILLATING FLOW

NT OUTLET FLOW
NT PARALLEL FLOW
NT PIPE FLOW
NT POTENTIAL FLOW
NT RADIAL FLOW
NT REATTACHED FLOW
NT RECIRCULATIVE FLUID FLOW
NT REVERSED FLOW
NT SECONDARY FLOW
NT SEPARATED FLOW
NT SHEAR FLOW
NT SLIP FLOW
NT SMALL PERTURBATION FLOW
NT STEADY FLOW
NT STRATIFIED FLOW
NT SUBCRITICAL FLOW
NT SUBSONIC FLOW
NT SUPERCAVITATING FLOW
NT SUPERCRITICAL FLOW
NT SUPERSONIC FLOW
NT SUPERSONIC JET FLOW
NT THREE DIMENSIONAL FLOW
NT TRANSITION FLOW
NT TRANSONIC FLOW
NT TURBULENT FLOW
NT TWO DIMENSIONAL FLOW
NT TWO PHASE FLOW
NT UNIFORM FLOW
NT UNSTEADY FLOW
NT VERTICAL AIR CURRENTS
NT VISCOUS FLOW
NT WALL FLOW
NT WEDGE FLOW
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
Research on the statically thrusting propeller
[NASA-CR-157214] p0409 N78-25092
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371

FLUID INJECTION
NT GAS INJECTION
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
Unsteady fluid flow in a swirl injector
p0581 A78-50781
Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow
p0582 A78-50797
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896

FLUID JET AMPLIFIERS
U FLUID AMPLIFIERS

FLUID JETS
NT AIR JETS
NT FREE JETS
NT GAS JETS

FLUID MECHANICS
NT AERODYNAMICS
NT AEROTHERMODYNAMICS
NT FLUID DYNAMICS
NT GAS DYNAMICS
NT HYDRODYNAMICS
NT HYDROMECHANICS
NT RAREFIED GAS DYNAMICS
NT ROTOR AERODYNAMICS
New structuralization and work of current interest in the research area of fluid mechanics --- propulsion systems, aerodynamics and acoustics
p0337 A78-34941
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752
Gesellschaft fuer angewandte Mathematik und Mechanik, Annual Scientific Meeting, Lyngby, Denmark, May 31-June 3, 1977, Reports. Part 2
p0583 A78-51151
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090

FLUID TRANSPIRATION
U TRANSPIRATION

FLUIDIC CIRCUITS
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523

FLUIDICS
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
Fabrication and test of a fluidic fuel-control and bleed-air-load-control system for gas turbine engines
[AD-A049039] p0265 N78-19163

FLUIDIZED BED PROCESSORS
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372

FLUORESCENCE
NT X RAY FLUORESCENCE
Airborne Oceanographic Lidar System
p0053 A78-14878
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320

FLUORESCENT EMISSION
U FLUORESCENCE

FLUORINE COMPOUNDS
NT FLUORO COMPOUNDS
NT FLUOROCARBONS
NT FLUOROPOLYMERS

FLUORINE ORGANIC COMPOUNDS
NT FLUOROCARBONS
NT FLUOROPOLYMERS

FLUORO COMPOUNDS
NT FLUOROCARBONS
NT FLUOROPOLYMERS
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686

FLUOROCARBONS
In-service performance of polyurethane and fluorocarbon rain erosion resistant radome coatings
p0219 A78-25205

FLUOROPOLYMERS
Piezoelectric polymer transducers for detection of structural defects in aircraft
[AD-A055729] p0621 N78-32903

FLUTTER
NT PANEL FLUTTER
NT SUPERSONIC FLUTTER
NT TRANSONIC FLUTTER
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
Comment on 'Effect of stabilizer dihedral and static lift on T-tail flutter'
p0416 A78-40800
Aerodynamic interference in a system of two harmonically oscillating airfoils and its influence on flutter
p0019 N78-10016
Wind tunnel study of an active flutter suppression system --- wing with external tank
p0046 N78-11974
Effects of structural non-linearities on aircraft vibration and flutter
[AGARD-R-665] p0211 N78-17076
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109

Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
Unsteady blade rows in high-speed flow
[AD-A055620] p0615 N78-32391

FLUTTER ANALYSIS
The characteristics, prediction and test analysis of supersonic flutter in turbofan engines
p0058 A78-15176
The effect of aerodynamic interference of wing and horizontal tail assembly on the critical velocity of flutter of a flight vehicle
p0126 A78-19633
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures --- aircraft structural analysis
p0127 A78-19656
Calculation of the flow past a vibrating airfoil section in transonic gas flow
p0127 A78-19669
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
Taking into account the effect of elasticity of the structure on the longitudinal short-period motion of an aircraft
p0164 A78-20882
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatability of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
Flutter tests of the mated 747 Shuttle Carrier Aircraft-Orbiter
[SAE PAPER 770971] p0179 A78-23816
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
New methods for flight vibration studies --- using Fourier analysis
[DGLR PAPER 77-050] p0191 A78-24439
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
Continuation and direct solution of the flutter equation
p0221 A78-25703
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
Theory of bending-torsional self-oscillations of an aircraft wing system
p0292 A78-32264
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
A flutter analysis of a system of two airfoils with aerodynamic interference
p0338 A78-34968
Notes on the transonic indicial method --- for two dimensional airfoil flutter derivative calculation
p0376 A78-37732
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
Close encounters of the aeroservoelastic kind --- aerodynamics, structural dynamics, and automatic flight control systems for aircraft design applications
[AIAA 78-1289] p0542 A78-50196
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618
Density of motions in the flutter of infinite plates
p0594 A78-52932
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
An analysis of the flutter and damping characteristics of helicopter rotors
p0030 N78-10111
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004
Flutter analysis of a glider made of synthetic materials
[NASA-TM-75160] p0079 N78-12012
Flutter of control surfaces with structural nonlinearities --- missile control surfaces
[AD-A045221] p0099 N78-13073
Research on the flutter of axial-turbomachine blading
[AD-A047086] p0194 N78-16021
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
User's guide for a modular flutter analysis software system (fast version 1.0)
[NASA-TM-78720] p0492 N78-28101
Considerations on wing stores flutter: Asymmetry, flutter suppression
[AGARD-R-669] p0565 N78-31126
Asymmetric store flutter
p0566 N78-31127

FLUX (RATE PER UNIT AREA)
U FLUX DENSITY

FLUX (RATE)
NT MAGNETIC FLUX

FLUX DENSITY
NT CURRENT DENSITY
NT LUMINOUS INTENSITY
NT SOUND INTENSITY
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117

FLUX MAPPING
U FLUX DENSITY
U MAPPING

FLUXMETERS
U MEASURING INSTRUMENTS

FLY BY WIRE CONTROL
Navy advanced sensor programs for fly-by-wire

aircraft
[AIAA 77-1504] p0006 A78-12251
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data --- Failure Detection and Identification for Digital Fly-By-Wire control
[AIAA 77-1506] p0007 A78-12252
Flight experience with a fail-operational digital fly-by-wire control system
[AIAA 77-1507] p0007 A78-12253
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
NASA's advanced control law program for the F-8 digital fly-by-wire aircraft
p0013 A78-12357
Adaptive control laws for F-8 flight test
p0013 A78-12358
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
A moving window parameter adaptive control system for the F8-DFBW aircraft
p0013 A78-12361
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
Electrical load management for advanced aircraft electrical systems
p0062 A78-15575
System description and performance characteristics of a quad redundant strapdown inertial navigation and flight control system
p0065 A78-15641
Fly-by-wire flight control
p0280 A78-29935
The role of avionics in modern aircraft
p0328 A78-32651
In-line monitoring of digital flight control computers
p0531 A78-49860
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
Triplex digital fly-by-wire redundancy management techniques
[AIAA 78-1279] p0541 A78-50187
A learning flight control system for the F8-DFBW aircraft --- Digital Fly-By-Wire
[AIAA 78-1288] p0542 A78-50195
Military transport (C-141) fly-by-wire program
[AD-A046163] p0143 N78-14056
Research and development of aircraft control actuation systems. The development of a direct drive fly-by-wire flight control system and evaluation of a force sharing fly-by-wire actuator
[AD-A047283] p0200 N78-16065
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
Description and theory of operation of the computer by-pass system for the NASA F-8 digital fly-by-wire control system
[NASA-CR-144865] p0349 N78-22076
Heavy lift helicopter flight control system. Volume 1: Production recommendations
[AD-A050618] p0353 N78-22113
An adaptive learning control system for aircraft
[NASA-CP-156930] p0413 N78-25966
The terrain following task for the advanced tactical fighter using discrete optimal control
[AD-A055196] p0565 N78-31121

FLYING PERSONNEL
NT AIRCRAFT PILOTS
NT FLIGHT CREWS
NT TEST PILOTS
Some factors influencing Air Force simulator training effectiveness
[AD-A043239] p0044 N78-11128

FLYING PLATFORM STABILITY
U AERODYNAMIC STABILITY

FLYING QUALITIES
U FLIGHT CHARACTERISTICS

FOAMS
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924

FOCUSING
NT SELF FOCUSING
Long-distance focusing of Concorde sonic boom
p0517 A78-48052
Some comments on sonic boom focusing
p0584 A78-51172

FOG
The FAA Slant Visibility Range measurement system
p0056 A78-14996
Vertical fog classifications and slant/runway visual range ratios
p0056 A78-14997

FOG DISPERSAL
Technical, economic and operational aspects of an FAA engineering study and feasibility determination for a ground-based warm fog dispersal system
p0056 A78-14993
A modern warm fog dispersal system
p0056 A78-14994
The Turboclair process --- fog dispersal techniques
p0571 A78-50449
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
Test report on the application of the Linde fog removal equipment at the Erding air base --- Germany
[DLR-IB-75/8] p0145 N78-14763

FOKKER AIRCRAFT
NT F-27 AIRCRAFT
NT F-28 TRANSPORT AIRCRAFT
Use of and experience with simulation in the development of the VFW 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942

FOKKER F 27 AIRCRAFT
U F-27 AIRCRAFT

FOKKER F 28 AIRCRAFT
U F-28 TRANSPORT AIRCRAFT

FOKKER FRIENDSHIP AIRCRAFT
U F-27 AIRCRAFT

FORCE DISTRIBUTION
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Investigation of a side force due to ablation --- reentry vehicle spin dynamic stability tests
p0571 A78-50457
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
An analysis of the force system of a propeller
[CRANFIELD-AERO-33] p0147 N78-15003
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056

FORCED OSCILLATION
U FORCED VIBRATION

FORCED VIBRATION
Dynamics of a string accelerometer
p0131 A78-20256
Experimental study on blade bending vibration
[CUED/A-TURBO/TR-88] p0361 N78-23090
Forced vibration of thin elastic shells with application to fractional horsepower hermetic refrigeration compressor shells
p0616 N78-32457

FORCED VIBRATORY MOTION EQUATIONS
U FORCED VIBRATION

FOREBODIES
NT ABLATIVE NOSE CONES
NT NOSE CONES
NT NOSES (FOREBODIES)
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
Drag formula for elongated aircraft noses
p0278 A78-29718
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[AIAA 78-785] p0295 A78-32343
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
FORECASTING
NT PERFORMANCE PREDICTION
NT PREDICTION ANALYSIS TECHNIQUES
NT TECHNOLOGICAL FORECASTING
NT WEATHER FORECASTING
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075
FORECASTS
U FORECASTING
FOREIGN POLICY
NT INTERNATIONAL COOPERATION
FORENSIC SCIENCES
U LAW (JURISPRUDENCE)
FOREST FIRES
Current trends in the aerial application of fire retardants
p0425 A78-42512
FORGING
Design philosophy for engine forgings
p0509 A78-47452
Design philosophy for airframes
p0509 A78-47453
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199
FORM PERCEPTION
U SPACE PERCEPTION
FORMING TECHNIQUES
NT CASTING
NT ELECTROFORMING
NT FORGING
NT HOT WORKING
NT ROLL FORMING
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
Metals in flight /2nd enlarged and revised edition/ --- aircraft and spacecraft construction materials
p0415 A78-40375
FORMULAS (MATHEMATICS)
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
FORTRAN
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113
FORWARD LOOKING INFRARED DETECTORS
U FLIR DETECTORS
FOSSIL FUELS
NT CRUDE OIL
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229
FOURIER ANALYSIS
New methods for flight vibration studies --- using Fourier analysis
[DGLR PAPER 77-050] p0191 A78-24439
Azimuthal decomposition of the power spectral density of jet noise
p0375 A78-37532
FOURIER TRANSFORMATION
NT FAST FOURIER TRANSFORMATIONS
FRACTOGRAPHY
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
FRACTURE MECHANICS
Application of fracture mechanics data to aerospace design
p0050 A78-13414
Determination of the constants of the diffusion theory of fatigue fracture
p0132 A78-20289
The strength of structures and the applications of the fracture mechanics
p0178 A78-23574
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
Case studies in fracture mechanics
[AD-A045877] p0102 N78-13482
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
Report on aircraft fatigue studies --- in-flight monitoring and stress measurements
[AD-A049876] p0317 N78-21102
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199
Titanium damage tolerant design data for propulsion systems --- gas turbine engine components
[AD-A053252] p0442 N78-26202
Fracture mechanics for structural adhesive bonds
[AD-A054023] p0504 N78-29509
Mechanisms of fatigue and fracture
p0553 N78-30273
Fracture mechanics fundamentals with reference to aircraft structural applications
p0554 N78-30274
Recent developments in analysis of crack propagation and fracture of practical materials --- stress analysis in aircraft structures
[NASA-TM-78766] p0556 N78-30606
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions --- airframe fatigue cracking
[AD-A055483] p0617 N78-32504
FRACTURE RESISTANCE
U FRACTURE STRENGTH
FRACTURE STRENGTH
Fracture analysis of aerospace metals
p0175 A78-22724
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769
Application of resistance curves to residual strength prediction
p0339 A78-35380
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
Influence of the type of corrosion of the aircraft skin on limiting value of the damage

p0383 A78-38907
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings --- rings and loops, safety belts and one-way load equipment
[DLR-IB-152-75/25] p0044 N78-11204
Correlation of microstructure with fracture toughness properties in metals, part 3 --- titanium alloys
[AD-A043741] p0045 N78-11238
Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213

FRACTURE TOUGHNESS
U FRACTURE STRENGTH

FRACTURES (MATERIALS)
The collection and analysis of fatigue damage occurring in aircraft in service
[RAE-LIB-TRANS-1934] p0349 N78-22077

FRAGMENTATION
Engine non-containment: The UK CAA view
p0025 N78-10070
Types of rotor failure and characteristics of fragments
p0025 N78-10073
Ceramic composite protection for turbine disc bursts --- for the A-300 aircraft
p0026 N78-10083
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084

FRAGMENTS
Blade fragment energy analysis
p0025 N78-10074
Approaches to rotor fragment protection
p0026 N78-10076
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078

FRAMES
NT AIRFRAMES
NT UNDERCARRIAGES

FRANCE
Considerations on the selection of a radionavigation system for the coasts of France
p0073 A78-16352
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
The new railroad artery Paris-Sud-Est and high-speed trains: How the Paris Sud-Est was born - Basic options --- for high speed passenger trains
p0219 A78-25263
The present status and evolution of the inspection of carbon composite aircraft structures in France
p0444 N78-26478

FRAUNHOFER REGION
U FAR FIELDS

FREDHOLM OPERATORS
U OPERATORS (MATHEMATICS)

FREE CONVECTION
Prediction of the ascending speeds of gliders in thermal convection over a plain
p0177 A78-23398
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288

FREE FALL
Operator work capacity during parachutist free-fall
p0517 A78-47978

FREE FLIGHT
Theory of dolphin-style glider flight and principles of dynamic flight. I
p0231 A78-28195

FREE FLOW
Numerical simulation of the interaction of jet and freestream flows in engine exhaust systems
[AIAA PAPER 78-144] p0173 A78-22584
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
Effects of acoustic and vortical disturbances on the turbulent boundary layer at free-stream Mach number 0.5
[AD-A047921] p0205 N78-17026
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
Wind-tunnel investigation at supersonic speeds of a canard-controlled missile with fixed and free-rolling tail fins
[NASA-TP-1316] p0606 N78-32067

FREE JETS
Interaction of a shock wave with an entropy layer
p0164 A78-20886
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058

FREE MOLECULAR FLOW
An analytic study of free molecule flow fields at the front and back edges of a plate
p0274 A78-28972
Measurement of momentum transport to surfaces of different form in a hypersonic free-molecular stream
p0335 A78-34448
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200

FREE OSCILLATIONS
U FREE VIBRATION

FREE STREAM EFFECTS
U FREE FLOW

FREE STREAMS
U FREE FLOW

FREE VIBRATION
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
Determination of nonlinearities of dynamic stability --- of wind tunnel models
[ONERA, TP NO. 1978-52] p0479 A78-45280
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
Natural vibrations of a rigid rotor mounted on elastic ball bearings
p0582 A78-51015

FREEDOM FIGHTER AIRCRAFT
U F-5 AIRCRAFT

FREIGHTERS
Distributed load aircraft concepts
[AIAA PAPER 78-100] p0172 A78-22573
Design concepts for future air freighters
p0592 A78-52450
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278

FREON
Comparison of aerodynamic data measured in air and Freon-12 wind-tunnel test mediums
[NASA-TM-78671] p0312 N78-21052

FREQUENCIES
NT BROADBAND
NT C BAND
NT EXTREMELY HIGH FREQUENCIES

NT HIGH FREQUENCIES
NT INFRASONIC FREQUENCIES
NT LOW FREQUENCIES
NT NYQUIST FREQUENCIES
NT RESONANT FREQUENCIES
NT SUPERHIGH FREQUENCIES
NT ULTRAHIGH FREQUENCIES
NT VERY HIGH FREQUENCIES
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] p0210 N78-17070

FREQUENCY ANALYZERS
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721

FREQUENCY ASSIGNMENT
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
FAA remote terminal system
[AD-A054604] p0493 N78-28295
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297

FREQUENCY BANDS
U FREQUENCIES

FREQUENCY CONTROL
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106

FREQUENCY CONVERTERS
NT FREQUENCY SYNTHESIZERS

FREQUENCY DISTRIBUTION
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127

FREQUENCY DIVISION MULTIPLEXING
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343

FREQUENCY MODULATION
NT PULSE FREQUENCY MODULATION

FREQUENCY RANGES
Theory on the two-frequency ranges for the unsteady fluctuations of the turbulent combustion process in a jet-engine combustion chamber. II - Analysis of the characteristic equation, comparison with the experiment
p0580 A78-50778

FREQUENCY REGULATION
U FREQUENCY CONTROL

FREQUENCY RESPONSE
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
New frequency domain methods for system identification
p0182 A78-23883
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952

FREQUENCY SCANNING
The victory of the frequency-reference beam over the Doppler MLS at AWOP 6 --- MLS for all-weather conditions
p0115 A78-18664

FREQUENCY STABILITY
A compensation technique for acceleration-induced frequency changes in crystal oscillators
p0530 A78-49859

FREQUENCY STANDARDS
Active reference null steering for spread spectrum signals
p0226 A78-27038

FREQUENCY SYNCHRONIZATION
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106

FREQUENCY SYNTHESIZERS
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106

FRETTING
Coatings for fretting prevention
p0178 A78-23441

FRICTION
NT AERODYNAMIC DRAG
NT FLOW RESISTANCE
NT FRICTION DRAG
NT SKIN FRICTION
NT SLIDING FRICTION
NT SUPERSONIC DRAG
NT VISCOUS DRAG
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060

FRICTION DRAG
NT AERODYNAMIC DRAG
NT SUPERSONIC DRAG
NT VISCOUS DRAG
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064

FRICTION FACTOR
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer
p0420 A78-41512
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371

FRICTION LOSS COEFFICIENT
U FRICTION FACTOR

FRICTION MEASUREMENT
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043

FRICTION PRESSURE DROP
U SKIN FRICTION

FRICTION WELDING
Application of new joining techniques in small gas turbines
[DGLR PAPER 77-070] p0116 A78-18705

FRINGE PATTERNS
U DIFFRACTION PATTERNS

FRONTAL AREAS (METEOROLOGY)
U FRONTS (METEOROLOGY)

FRONTS (METEOROLOGY)
Atmospheric pressure jumps measured with arrays of sensitive pressure sensors in the vicinity of Chicago's O'Hare International Airport
[PB-277518/7] p0356 N78-22551
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692

FROUDE NUMBER
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968

FUEL CELLS
Tests of crash-resistant fuel system for general aviation
[AD-A054141] p0490 N78-28081

FUEL COMBUSTION
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566

Modeling solid-fuel ramjet combustion
p0076 A78-16709
Study of a turbomachine combustor with swirling flow
[ONERA, TP NO. 1977-170] p0108 A78-17662
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Investigating the efficiency of gas turbines in off-design operation --- multistage experimental data
p0377 A78-37860
The catalytic combustor - An approach to cleaner combustion --- by reaction control in gas turbine engines
p0416 A78-40820
Combustion performance of gas turbine combustors burning alternative fuels
[AIAA PAPER 78-1000] p0465 A78-43547
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
Combustor performance of high availability fuels
p0572 A78-50568
Variability of emissions measurements on a small gas turbine engine
p0572 A78-50569
Alternative fuel effects upon combustion efficiency in continuous combustors
p0572 A78-50571
Mechanism of pulsating combustion of the liquid fuel fed to the airflow through the circulation zone behind the flame stabilizer
p0581 A78-50788
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798
Fuel combustor
[NASA-CASE-LEW-12137-1] p0031 N78-10224
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Characteristics and combustion of future hydrocarbon fuels --- aircraft fuels
[NASA-TM-78865] p0401 N78-24370
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102

FUEL CONSUMPTION

Adaptation for economization, or adaptation for the economization of energy --- in transport aircraft design and operation
p0003 A78-12030
Energy savings - The viewpoint of an aircraft manufacturer
p0003 A78-12031
Helicopters and energy savings
p0056 A78-15020
Future fuels for aviation
[ONERA, TP NO. 1977-156] p0057 A78-15021
An optimistic view of the plane facts --- cost-efficient airliners development
p0057 A78-15086
Advances in aircraft efficiency
p0112 A78-18022
A singular perturbation analysis of optimal aerodynamic and thrust magnitude control
p0183 A78-23900
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034
Return of the propeller
p0220 A78-25516
Certifying the Learjet to 51,000 feet
p0234 A78-28462
General aviation energy-conservation research programs at NASA-Lewis Research Center --- for non-turbine general aviation engines
p0276 A78-29330
Aviation fuel usage - Economy and conservation
p0285 A78-30698
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-31307
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309
Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
STOL system fuel savings - Ground and air
p0287 A78-31312
The energy costs of some noise abatement procedures
p0288 A78-31313
Air traffic control and energy conservation in air operations
p0288 A78-31314
Supersonic transport in terms of energy savings
p0342 A78-35893
Aero engines climb towards better fuel efficiency
p0372 A78-37114
The impact of flight simulators on U.S. airlines
p0382 A78-38798
CTOL concepts and technology development
p0461 A78-43358
Airframes and aerodynamics --- aircraft design in NASA Energy Efficient Transport program
p0461 A78-43359
Propulsion --- NASA program for aircraft fuel consumption reduction
p0461 A78-43360
The effect of fuel consumption on cost developments
p0469 A78-44197
Helicopter fuel economy evaluation
[SAE AS 1516] p0471 A78-44682
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
A perspective of laminar-flow control --- aircraft energy efficiency program
[AIAA PAPER 78-1528] p0481 A78-46503
Let's put fuel efficiency into perspective
p0508 A78-47269
The second generation of high-bypass turbofans - A market clouded by uncertainty
p0509 A78-47423
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
Choice of cycle for a regenerative bypass turbojet for long-range aircraft
p0527 A78-49723
Advantages of 3-shaft KTT gas turbine configurations for automotive applications
p0575 A78-50602
Energy economy with high temperature gasturbine
p0575 A78-50604
Lost range, fuel and time due to climb and descent: Propeller-driven aeroplanes
[ESDU-77015] p0084 N78-12066
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549
Fuel conservation merits of advanced turboprop transport aircraft
[NASA-CR-152096] p0316 N78-21095

Energy savings. An aircraft constructor's viewpoint
[AAAF-NT-77-24] p0397 N78-24127
Helicopters and energy savings
[AAAF-NT-77-25] p0397 N78-24128
An operator's viewpoint: How to reduce the fuel consumption in aeronautical maintenance
[AAAF-NT-77-26] p0397 N78-24129
Supersonic transportation faced with energy savings
[AAAF-NT-77-28] p0397 N78-24131
ACEE propulsion overview
p0446 N78-27048
Energy efficient engine: Preliminary design and integration studies
p0447 N78-27053
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600

FUEL CONTROL
Fabrication and test of a fluidic fuel-control and bleed-air-load-control system for gas turbine engines
[AD-A049039] p0265 N78-19163

FUEL CORROSION
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025

FUEL FLOW
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298
Study of a turbomachine combustor with swirling flow
[ONERA, TP NO. 1977-170] p0108 A78-17662
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568
Double row radial hydraulic piston pumps for aircraft hydraulic systems
p0598 A78-53249

FUEL FLOW REGULATORS
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523

FUEL GAGES
Solid-state displays for fuel management systems --- for aircraft
p0510 A78-47900

FUEL INJECTION
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Effect of airstream velocity on mean drop diameters of water sprays produced by pressure and air atomizing nozzles --- for combustion studies
p0329 A78-33111
Development of a catalytic combustor fuel/air carburetion system
p0329 A78-33113
Development of a catalytic combustor fuel/air carburetion system
[AD-A044063] p0088 N78-12093
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
Interaction between step fuel injectors on opposite walls in a supersonic combustor model
[NASA-TP-1174] p0362 N78-23094
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130

FUEL PUMPS
The effect of fluid oscillations in a fuel line on the pressure head of a pump operating in a regime without reverse streams
p0187 A78-24259
Aircraft engine fuel pump cavitation endurance test
[SAE ARP 492B] p0471 A78-44685
Double row radial hydraulic piston pumps for aircraft hydraulic systems
p0598 A78-53249

FUEL SPRAYS
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Ignition of liquid fuel sprays at subatmospheric pressures
p0470 A78-44268

FUEL SYSTEMS
NT AIRCRAFT FUEL SYSTEMS
Fuel combustor
[NASA-CASE-LEW-12137-1] p0031 N78-10224
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
Fuel conservative aircraft engine technology
[NASA-TM-78962] p0454 N78-27127

FUEL TANKS
NT WING TANKS
The weight of fuel tanks in aircraft
p0175 A78-22848
The need for improved materials in integral aircraft fuel tanks
p0217 A78-25177
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
F-111 depot fuselage fuel tank deseal/reseal procedures
[AD-A050819] p0349 N78-22078
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
Tests of crash-resistant fuel system for general aviation
[AD-A054141] p0490 N78-28081
Fundamentals of noncuring sealants for aircraft fuel tanks
[AD-A054627] p0553 N78-30247

FUEL TESTS
Technical-analytical assistance now even in the field --- transportable lab for analysis of jet fuels and liquid oxygen supplies
p0119 A78-19053
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Properties of fuels used in the Czechoslovak aircraft industry
p0277 A78-29588
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371

FUEL VALVES
Use of a stepping motor for measuring fuel quantity in a digital system for control of

rotational speed
p0277 A78-29586
FUEL-AIR RATIO
Development of a catalytic combustor fuel/air carburetion system
p0329 A78-33113
The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
FUELING
U REFUELING
FUELS
NT AIRCRAFT FUELS
NT CHEMICAL FUELS
NT CLEAN FUELS
NT DIESEL FUELS
NT FOSSIL FUELS
NT HYDROCARBON FUELS
NT HYDROGEN FUELS
NT JET ENGINE FUELS
NT JP-4 JET FUEL
NT JP-5 JET FUEL
NT KEROSENE
NT LIQUEFIED NATURAL GAS
NT SLURRY PROPELLANTS
NT SOLID ROCKET PROPELLANTS
NT SYNTHETIC FUELS
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
FULL SCALE TESTS
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
Preliminary comparison of model and prototype wakes --- building wake effects on atmospheric boundary layer
[AIAA PAPER 78-254] p0162 A78-20774
Multipath fading simulation model and full-scale results --- polarized electromagnetic signal transmission
p0221 A78-25879
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
Supersonic aerothermal testing - A new requirement
[AIAA 78-773] p0294 A78-32333
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[AIAA 78-785] p0295 A78-32343
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
FUNCTION GENERATORS
ATE and avionics display systems
p0417 A78-40924
FUNCTIONAL ANALYSIS
NT HARMONIC ANALYSIS
NT INTEGRAL EQUATIONS
NT INTEGRAL TRANSFORMATIONS
NT SINGULAR INTEGRAL EQUATIONS
Variational principles for the transonic airfoil problem
p0285 A78-30891
FUNCTIONS (MATHEMATICS)
NT CONFORMAL MAPPING
NT DISCRETE FUNCTIONS
NT DISTRIBUTION FUNCTIONS
NT ERROR FUNCTIONS
NT GREEN FUNCTION
NT HAMILTONIAN FUNCTIONS
NT KERNEL FUNCTIONS
NT MEROMORPHIC FUNCTIONS
NT ORTHOGONAL FUNCTIONS
NT RAYLEIGH DISTRIBUTION
NT SPLINE FUNCTIONS
NT STEP FUNCTIONS
NT TIME FUNCTIONS
NT TRANSFER FUNCTIONS
NT WEIBULL DENSITY FUNCTIONS
Rocket structures
p0612 N78-32123
FUSELAGE MOUNTING
U AIRCRAFT PRODUCTION
FUSELAGES
External drag and base pressure of fuselage tail sections of various configuration
p0128 A78-19683
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
A superelement technique for designing helicopter fuselages
p0174 A78-22627
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
On sound transmission into a heavily-damped cylinder --- aircraft noise in fuselage
p0285 A78-31019
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Superelement method for helicopter fuselage analysis
p0517 A78-48209
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
Aerodynamic centre of wing-fuselage-nacelle combinations: Effect of wing-pylon mounted nacelles
[ESDU-77012] p0079 N78-12010
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
On some structure-turbulence interaction problems
p0193 N78-15996
The interference problem of the oscillating fuselage near ground
p0204 N78-17008
Superelement method of designing a helicopter fuselage
p0206 N78-17043
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
Slender body theory programmed for bodies with arbitrary cross section --- including fuselages
[NASA-CR-145383] p0437 N78-26102
Primary Adhesively Bonded Structure Technology (PABST). Phase 1: Detail design
[AD-A056857] p0626 N78-33095
FUSION WELDING
NT BRAZING
NT ELECTRON BEAM WELDING

NT GAS TUNGSTEN ARC WELDING
NT PLASMA ARC WELDING
FV-12A AIRCRAFT
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors [AIAA PAPER 78-1509] p0516 A78-47945
F4H AIRCRAFT
U F-4 AIRCRAFT
F8U AIRCRAFT
U F-8 AIRCRAFT

G

G FORCE
U ACCELERATION (PHYSICS)
GAGES
U MEASURING INSTRUMENTS
GALAXY AIRCRAFT
U C-5 AIRCRAFT
GALERKIN METHOD
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels [NASA-CR-2967] p0313 N78-21059
GAME THEORY
Application of near-optimal differential game feedback strategies to aircraft weapon delivery maneuvers p0063 A78-15628
Emergency air traffic control and cooperative nonzero sum differential games p0072 A78-16317
Optimization and differential games p0592 A78-52401
GARNETS
NT YTTRIUM-IRON GARNET
GAS ANALYSIS
NT OZONOMETRY
The time response of an aspirating probe in gas sampling p0001 A78-10600
Development of emissions measurement techniques for afterburning turbine engines, supplement 1 [AD-A045491] p0098 N78-13066
Sources of variability and inaccuracies in aircraft gas turbine emission measurements [PB-270898/0] p0099 N78-13069
Test procedure analysis and recommendations for supersonic transport aircraft emission measurement [PB-270864/2] p0102 N78-13634
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60) [AD-A047801] p0207 N78-17046
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace [AD-A054811] p0547 N78-30088
GAS DENSITY
The time response of an aspirating probe in gas sampling p0001 A78-10600
GAS DETECTORS
Fire detection devices --- for aircraft cabins p0175 A78-22900
Fire detector response in aircraft applications p0599 A78-53674
GAS DISCHARGE COUNTERS
U GAS DISCHARGE TUBES
GAS DISCHARGE TUBES
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller [DLR-FB-77-32] p0245 N78-18073
GAS DISCHARGES
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter [AD-A039735] p0311 N78-20636
GAS DYNAMICS
NT AERODYNAMICS
NT AEROTHERMODYNAMICS
NT RAREFIED GAS DYNAMICS
NT ROTOR AERODYNAMICS
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation --- German book p0175 A78-22937
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle p0379 A78-38641
Real-gas version of the gasdynamic formulas of Saint-Venant and Wantzel p0570 A78-50304
Some problems of continuum mechanics --- Russian book p0580 A78-50751
Self-focusing of a Gaussian beam in a supersonic gas flow p0585 A78-51387
GAS EXPANSION
Sudden expansion of a supersonic jet in a cylindrical duct p0128 A78-19670
A critical examination of expansion tunnel performance [AIAA 78-768] p0294 A78-32329
Calculations of flows in flat asymmetric nozzles for overexpanded conditions p0581 A78-50782
Turboexpanders for energy conservation p0598 A78-51621
Operational experience in the Langley expansion tube with various test gases --- for atmospheric entry simulation [NASA-TM-78637] p0152 N78-15060
GAS FLOW
NT AIR CURRENTS
NT AIR FLOW
NT EQUILIBRIUM FLOW
NT FREE MOLECULAR FLOW
NT MERIDIONAL FLOW
NT MOLECULAR FLOW
NT NONEQUILIBRIUM FLOW
NT PIPE FLOW
NT SLIP FLOW
NT TRANSITION FLOW
NT VERTICAL AIR CURRENTS
Hypersonic flow of a viscous gas in a nozzle p0127 A78-19651
Obtaining exact solutions for shock-free flow past a symmetrical airfoil profile with a local supersonic zone p0127 A78-19668
Calculation of the flow past a vibrating airfoil section in transonic gas flow p0127 A78-19669
Experimental investigation of the supersonic gas flow past a rectangular wing p0129 A78-19715
Three-dimensional hypersonic gas flow past a thin wing p0163 A78-20795
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities p0165 A78-20900
Hypersonic gas flow past a flat delta wing p0166 A78-20966
Calculation of the Laval-nozzle flow by a modified Lax-Wendroff method of second-order accuracy p0166 A78-20970
Construction of a mathematical model of a jet engine for analyzing transient flows p0167 A78-20971
Entropy layer in two-dimensional flows --- hypersonic ideal gas flow behind shock wave p0168 A78-21132
Transonic swirling gas flow through a nozzle p0170 A78-22355
Stability of subsonic gasdynamic flows p0274 A78-28959
Transonic flows past a lift profile p0274 A78-28961
Three-dimensional flow of hypersonic gas past a thin airfoil p0281 A78-30002
Study of gas flows with shearing interferometers p0327 A78-32622
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations p0334 A78-34435
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer p0420 A78-41512
The effect of two-dimensionality of the flow of a gas with stepwise distribution of total parameters on the integral characteristics of a

Laval nozzle
p0429 A78-43116
Combustion in flow --- Russian book on combustion theory applied to aircraft combustion chambers
p0485 A78-46583
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
Calculation of viscous radiant gas flows --- hypersonic reentry
p0599 A78-53556
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-X-74945] p0089 N78-12105
Operational experience in the Langley expansion tube with various test gases --- for atmospheric entry simulation
[NASA-TM-78637] p0152 N78-15060
Outline of aeroelastic phenomena
p0204 N78-17003
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079

GAS GENERATOR ENGINES
U GAS GENERATORS

GAS GENERATORS
Expendable design concept --- applied to gas generator for jet fuel starter
[AIAA PAPER 78-964] p0463 A78-43523
Compressor blade manufacture by electrochemical machining. Advanced turbine engine gas generator
[AD-A043742] p0030 N78-10110
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
Flame stabilization in a ramjet combustion chamber by means of a pilot gas generator
[DLR-FB-77-54] p0564 N78-31117

GAS HEATING
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372

GAS INJECTION
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
Thrust characteristics of thrust vector control systems with blowing injection of chemically nonreactive gases
p0187 A78-24254
Decay and modification of trailing vortex
p0230 A78-27908
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089

GAS JETS
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743

GAS LASERS
NT CARBON DIOXIDE LASERS

GAS LIQUEFACTION
U CONDENSING

GAS MIXTURES
NT COMPRESSED AIR

Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099

GAS STREAMS
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067

GAS TEMPERATURE
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157

GAS TUNGSTEN ARC WELDING
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391

GAS TURBINE ENGINES
NT DUCTED FAN ENGINES
NT HYDROGEN ENGINES
NT J-85 ENGINE
NT JET ENGINES
NT RAMJET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
NT T-38 ENGINE
NT T-55 ENGINE
NT T-58 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT TURBOFAN ENGINES
NT TURBOJET ENGINES
NT TURBOPROP ENGINES
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Some problems of GTE blade transpiration cooling
p0049 A78-13166
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
Analytic construction of part-throttle GTE characteristics
p0049 A78-13170
Statistical modeling of optimal GTE parameter trimming
p0049 A78-13173
Aircraft and helicopter engines - Fundamentals of design and flight operations --- Russian book
p0059 A78-15222
Gas-turbine-engine piping --- Russian book
p0070 A78-15941
Design of multivariable PID controllers with application to a gas-turbine --- Proportional Integral Derivative
p0072 A78-16308
Calibration of gas turbine instrumentation
p0105 A78-17361
Account of mainstream turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 77-HT-10] p0106 A78-17483
Aircraft engines and gas turbines --- Book
p0113 A78-18400
Improvements in the calculation of the centrifugal compressor flow by experimental study of the complex rotor flow
[DGLR PAPER 77-062] p0117 A78-18707
Transient speed response of a gas turbine
p0122 A78-19229
The answer to the 'engine deficiency' question --- design cycles for gas turbine engines
p0126 A78-19546
Core engine noise reduction - Definition and trends --- aircraft turboengine noise
[AIAA PAPER 77-1273] p0130 A78-19978

Investigations of the local heat transfer coefficient of a convection cooled rotor blade
p0319 N78-21126
Investigation on temperature distribution near film cocled airfoils
p0320 N78-21127
Erosion prevention and film cooling on vanes
p0320 N78-21128
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
The influence of coolant turbulence intensity on film cooling effectiveness
p0321 N78-21136
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
Low frequency combustion instability in augmentors
p0321 N78-21138
New materials for high temperature turbines: ONERA's DS composites confronted with the blade problems
p0321 N78-21139
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
Measuring techniques in high temperature turbines
p0322 N78-21151
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
FRS composites for advanced gas turbine engine components
[AD-A050595] p0355 N78-22165
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
Evaluation of a pressurized air start system for advanced army helicopters --- gas turbine engines
[AD-A051967] p0360 N78-23082
Turbine tip-clearance measurement
[AD-A052042] p0362 N78-23097
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
YF 102 in-duct combustor noise measurement, volume 1
[NASA-CR-135404-VOL-1] p0412 N78-25827
YF 102 in-duct combustor noise measurement, volume 3
[NASA-CR-135404-VOL-3] p0412 N78-25829
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Liquid-cooling technology for gas turbines review and status
[NASA-TM-78906] p0441 N78-26145
Titanium damage tolerant design data for propulsion systems --- gas turbine engine components
[AD-A053252] p0442 N78-26202
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
Gas turbine engine emission reduction technology program
p0447 N78-27058
Fabrication and test of digital output interface devices for gas turbine electronic controls
[NASA-CR-135427] p0455 N78-27129
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands --- gas turbine engines
[NASA-CR-135307] p0459 N78-27427
LACV-30 auxiliary power unit investigation
[AD-A053566] p0492 N78-28277
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
Computer program for the design and off-design performance of turbojet and turbofan engine cycles
[NASA-TM-78653] p0551 N78-30122
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
Analysis of the engine fragment threat and the crush environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078
Combustion and emission characteristics of a gas turbine combustor
p0610 N78-32095
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
Study of the turbine engine industry
[AD-A055895] p0612 N78-32103
Technical evaluation report on the 51st(B) PEP Specialists' Meeting of the Propulsion and Energetics Panel on Seal Technology in Gas Turbine engines
[AGARD-AR-123] p0612 N78-32104
High-temperature ceramics for automobile gas turbines
[NASA-TM-75457] p0614 N78-32264
High temperature ceramics for automobile gas turbines., Part 2: Development of ceramic components

[NASA-TM-75302] p0614 N78-32265
Independent power generator
[NASA-CASE-LAR-11208-1] p0617 N78-32539
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101
Ceramics technology readiness development program. Phase 1: Conceptual designs and material screening --- erosion/corrosion resistance
[PB-2786-12] p0632 N78-33243
GAS TURBINES
Investigation of turbine blade endurance during thermal cycling and vibration in a gas stream
p0001 A78-10267
The design and performance of high temperature turbines in turbofan engines
p0112 A78-18023
Review of the development of small- and medium-capacity gas turbines at the Motoren- und Turbinen Union
[DGLR PAPER 77-061] p0116 A78-18702
The state of development of ceramic components for gas turbines
[DGLR PAPER 77-072] p0116 A78-18703
Application of new joining techniques in small gas turbines
[DGLR PAPER 77-070] p0116 A78-18705
Design of long blades by method of constant circulation
p0122 A78-19230
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes --- for high temperature gas turbine blades
p0573 A78-50578
Near-hole region heat transfer in full-coverage film cooling --- for high temperature gas turbines
p0573 A78-50579
Film cooling of a gas turbine blade
p0573 A78-50580
Impingement cooling and its application to combustor design
p0573 A78-50584
Development of the can-type gas turbine combustors
p0574 A78-50590
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
Thermodynamical performances of closed-cycle gas-turbine
p0575 A78-50605
Turboexpanders for energy conservation
p0588 A78-51621
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109
Emissions control for ground power gas turbines
p0039 N78-11072
Soot formation in a turbulent swirling flow
p0040 N78-11075
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Laboratory studies of lean combustion
p0040 N78-11079
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
Study on stage of centrifugal compressor with air turbine
[AD-A045436] p0101 N78-13452
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
Advanced scavenge systems for an integrated engine inlet particle separator
[AD-A047872] p0210 N78-17069
Effect of fuel bound nitrogen on oxides of nitrogen emission from a gas turbine engine
[AD-A048382] p0264 N78-19162
Reduction of aircraft gas turbine engine pollutant emissions
[NASA-TM-78870] p0351 N78-22098
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
GAS VALVES
Analysis of a high speed ring valve system for a single cylinder reciprocating compressor
p0633 N78-33442
GAS WELDING
NT BRAZING
GAS-LIQUID INTERACTIONS
NT AIR WATER INTERACTIONS
GAS-METAL INTERACTIONS
The fluid dynamics of rarefied molecular flow over convex bodies - A new theory and applications
p0229 A78-27588
GAS-SOLID INTERFACES
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006
GASEOUS CAVITATION
U CAVITATION FLOW
U GAS FLOW
GASES
NT CARBON DIOXIDE
NT CARBON MONOXIDE
NT COMPRESSED AIR
NT DIATOMIC GASES
NT EXHAUST GASES
NT FLAMMABLE GASES
NT GAS MIXTURES
NT GAS STREAMS
NT HIGH TEMPERATURE AIR
NT HYDROGEN
NT IDEAL GAS
NT LIQUEFIED GASES
NT LIQUEFIED NATURAL GAS
NT LIQUID HYDROGEN
NT LIQUID OXYGEN
NT NITROGEN
NT OZONE
NT REAL GASES
GASP
U GLOBAL AIR SAMPLING PROGRAM
GAUSSMETERS
U MAGNETOMETERS
GAW-1 AIRFOIL
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
GC-130 AIRCRAFT
U C-130 AIRCRAFT
GEAR TEETH
Determination of bending stresses in a spur gear tooth
[RAE-LIB-TRANS-1923] p0504 N78-29452
GEARS
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607

An assessment of some forms of follower-tooth reduction gear and its application to helicopter main rotor gearboxes
[RAE-TR-77040] p0150 N78-15035
Engineering services to conduct qualification testing of precision forged spiral bevel gears
[AD-A051542] p0366 N78-23438
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
GENERAL AVIATION AIRCRAFT
NT DO-28 AIRCRAFT
NT YAK 40 AIRCRAFT
Changes in ground noise levels of general aviation aircraft derived from changes in cockpit noise levels
p0002 A78-11488
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Multi-system position determination - An innovative approach to low cost area navigation
[AIAA 77-1513] p0007 A78-12258
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
Problems of noise certifying business aircraft
p0015 A78-12824
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
The Bell Model 222 --- twin engine executive transport helicopter
[SAE PAPER 770951] p0179 A78-23802
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
Turbulent airfoils for general aviation
p0188 A78-24364
Profile design for an advanced-technology airfoil for general aviation aircraft
[DGLR PAPER 77-027] p0189 A78-24418
Advanced quiet propulsion for general aviation
[DGLR PAPER 77-044] p0190 A78-24433
The integrated shielded propeller as a drive system for general aviation aircraft
[DGLR PAPER 77-045] p0190 A78-24434
General aviation energy-conservation research programs at NASA-Lewis Research Center --- for non-turbine general aviation engines
p0276 A78-29330
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309
General aviation crash survivability
[SAE PAPER 780017] p0331 A78-33360
Rolls-Royce RB401 turbofan - A new business jet engine for the 1980's
p0375 A78-37538
A rising sun in aircraft --- Japanese commercial aircraft development programs
p0379 A78-38524
General aviation flight instrument displays
p0425 A78-42514
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721
General aviation dynamics --- aircraft activity forecasting by computerized simulation
p0428 A78-43041
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
From Challenger to winner --- Canadair executive jet design and development
p0510 A78-47570
The role of the computer in the flight testing of general aviation aircraft
[AIAA PAPER 78-1465] p0512 A78-47914
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
A preliminary study of the performance and characteristics of a supersonic executive aircraft
[NASA-TM-74055] p0095 N78-13040
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
Technical and financial fall-out on armed forces from commercial and export helicopter programmes
p0264 N78-19150
Civil and military design requirements and their influence on the product
p0264 N78-19151
Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
Some practical limitations to fuel-conservative civil engine technology
[AAAF-NT-77-29] p0351 N78-22092
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
General aviation avionics equipment maintenance
[NASA-CR-145342] p0398 N78-24132
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
Tests of crash-resistant fuel system for general aviation
[AD-A054141] p0490 N78-28081
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
General aviation airplane structural crashworthiness user's manual. Volume 3: Related design information
[AD-A054266] p0499 N78-29085
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KRASH theory
[AD-A055898] p0560 N78-31088
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
Profile design for an advanced-technology airfoil for general aviation aircraft
[NASA-TM-75323] p0605 N78-32054

Annual review of aircraft accident data, US general aviation, calendar year 1976
[PB-281330/1] p0624 N78-33064
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600

GENERAL AVIATION WHITCOMB AIRFOIL
U GAW-1 AIRFOIL

GENERAL DYNAMICS AIRCRAFT
NT CANADAIR AIRCRAFT
NT CV-340 AIRCRAFT
NT F-102 AIRCRAFT
NT F-106 AIRCRAFT
NT F-111 AIRCRAFT

GENERAL DYNAMICS MILITARY AIRCRAFT
U MILITARY AIRCRAFT

GEOASTROPHYSICS
U GEOPHYSICS

GEODESIC LINES
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523

GEODESY
NT CELESTIAL GEODESY

GEODETIC SATELLITES
Aeronautical knowledge, selected articles
[AD-A051710] p0367 N78-23986

GEODETIC SURVEYS
GDM/GPS receiver hardware implementation
p0062 A78-15589

GEOMETRY
NT ANGLE OF ATTACK
NT CUBES (MATHEMATICS)
NT DESCRIPTIVE GEOMETRY
NT ELEVATION ANGLE
NT FLOW GEOMETRY
NT GEODESIC LINES
NT HYPERBOLAS
NT IMBEDDINGS (MATHEMATICS)
NT NOZZLE GEOMETRY
NT PYRAMIDS
NT SPHEROIDS
NT TRIANGLES
NT VORTICITY
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
A three-dimensional potential-flow program with a geometry package for input data generation
[NASA-CR-145311] p0312 N78-21047

GEOPHYSICS
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189
Thirty years of fluid dynamics
p0585 A78-51280

GEORGIA
Aircraft accident report: Southern Airways Inc., DC-9-31, N1335U, New Hope, Georgia, April 4, 1977
[NTSB-AAR-78-3] p0314 N78-21064

GEOS SATELLITES (ESA)
Satellite images to aircraft in flight --- GEOS image transmission feasibility analysis
p0056 A78-14982

GEOS SATELLITES (ESRO)
U GEOS SATELLITES (ESA)

GEOSTROPHIC WIND
Numerical study on the stability dependence of geostrophic drag and cross-isobar angle
p0580 A78-50691

GERDIEN ARC HEATERS
U ARC HEATING
U HEATING EQUIPMENT

GERMANY
Concept and future plans for automation of air traffic control in the Federal Republic of Germany
p0596 A78-52972
Review of investigations on aeronautical fatigue in the Federal Republic of Germany, May 1975 - April 1977
[LBF-S-133] p0046 N78-11426
Test report on the application of the Linde fog removal equipment at the Erding air base --- Germany
[DLR-IB-75/8] p0145 N78-14763
German Army helicopter development and prospects for the future
p0261 N78-19128
The future of wind tunnel technology in Germany
[NASA-TM-75244] p0364 N78-23106

GHANA
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-76/3] p0137 N78-14002
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta --- hull temperature, flight data, operational problems
[DLR-IB-536-77/1] p0238 N78-18012

GIMBALS
Base motion sensitivity analysis for airborne ILIC pointing and tracking systems --- In-Loop Integration Control
p0063 A78-15593
Benefits of strapdown over gimbal INS systems for aircraft application
p0282 A78-30253

GLASS
NT GLASS FIBERS
Measurement of momentum transport to surfaces of different form in a hypersonic free-molecular stream
p0335 A78-34448
Glass airports --- building design
p0570 A78-50434
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119

GLASS FIBER REINFORCED PLASTICS
The use of composites in class 1 structures in helicopters --- for rotor blades
p0105 A78-17254
Today's non-metallic composite airframe structure - An airline assessment
p0218 A78-25196
Integrally stiffened laminate construction
p0370 A78-36431
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings --- rings and loops, safety belts and one-way load equipment
[DLR-IB-152-75/25] p0044 N78-11204

GLASS FIBERS
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976

GLAUERT COEFFICIENT
U AERODYNAMIC FORCES
U MACH NUMBER

GLIDE ANGLES
U GLIDE PATHS

GLIDE PATHS
Automatic system employing radioactive radiation to level-out an aircraft at landing
p0216 A78-25011
Glide path augmentation with inertial flight path angle
[AD-A046363] p0149 N78-15025
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043785] p0354 N78-22117
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet --- low visibility regimes
[AD-A052870] p0452 N78-27103
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073

GLIDE SLOPES
U GLIDE PATHS

GLIDERS
The development of the first pressurized sailplane
p0075 A78-16598
Why the flexible wing. II --- for glider design
p0176 A78-23058
Prediction of the ascending speeds of gliders in thermal convection over a plain
p0177 A78-23398
Theory of dolphin-style sailplane flight and the principles of dynamic flight. II
p0278 A78-29672

Fatigue life analysis of the L 13 /Blanik/ glider
p0283 A78-30360
Aerodynamic noise of gliders
p0328 A78-32971
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
Sailplanes of carbon-fiber construction
p0382 A78-38804
Flutter analysis of a glider made of synthetic materials
[NASA-TM-75160] p0079 N78-12012
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane
[VTH-LR-226] p0148 N78-15019
Pilot evaluation of sailplane handling qualities
[NASA-CR-2960] p0360 N78-23081
Methods and results of boundary layer measurements on a glider
[NASA-TM-75294] p0394 N78-24085
New model upwind distributions and their influence on the design of gliders
[DLR-IB-151-76/12] p0488 N78-28062
Trajectory optimization for some sailplane performance problems
p0560 N78-31083

GLIDING
Theory of dolphin-style glider flight and principles of dynamic flight. I
p0231 A78-28195

GLOBAL AIR SAMPLING PROGRAM
Global atmospheric sampling program
p0040 N78-11076

GLOBAL POSITIONING SYSTEM
Positioning and navigation by satellite --- for marine operations
[AIAA 77-1553] p0051 A78-13684
GDM/GPS receiver hardware implementation
p0062 A78-15589
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
A Navstar/GPS simulator
p0062 A78-15592
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
Satellite-aided ATC system concepts employing the Navstar Global Positioning System
[M77-59] p0111 A78-17903
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
Evaluation of geometric performance of global positioning system
p0378 A78-37987
Navstar GPS field test results
p0530 A78-49856
Comparisons of high anti-jam design techniques for GPS receivers --- Global Positioning System
p0530 A78-49857
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
A compensation technique for acceleration-induced frequency changes in crystal oscillators
p0530 A78-49859
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
The Navstar Global Positioning System /GPS/
p0594 A78-52952
Airworthiness evaluation NUH-1H helicopter with global positioning system
[AD-A047971] p0242 N78-18053

GLOBAL TRACKING NETWORK
Satellites for position determination
p0601 A78-53911

GLOTRAC (TRACKING NETWORK)
U GLOBAL TRACKING NETWORK

GOALS
On setting avionic subsystem unit production cost goals --- contract management and procurement policy
[AD-A051337] p0398 N78-24133

GOSS (SUPPORT SYSTEM)
U GROUND OPERATIONAL SUPPORT SYSTEM

GOVERNMENT PROCUREMENT
Tornado vital for NATO's changing requirements
p0059 A78-15383
Navy to seek design proposals for new V/STOLS
p0069 A78-15876
Aeronautical procurement - The primary specification system
[AIAA PAPER 78-1489] p0514 A78-47932
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
A study of the F-4 Program Management Responsibility Transfer (PMRT) from the Air Force Systems Command to the Logistics Command
[AD-A052903] p0413 N78-25974

GOVERNMENT/INDUSTRY RELATIONS
FAA role of certification - Advanced aircraft systems
[AIAA 77-1472] p0005 A78-12230
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
Planning for the next generation aircraft - An airline view
[AIAA PAPER 78-361] p0186 A78-24033
Prospects for a new generation air transport
[AIAA PAPER 78-363] p0186 A78-24035
The airline's role in the certification of aircraft - Criteria for air transport selection
p0417 A78-40995
And now 'the deregulators' - When will they learn
p0582 A78-51127
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
The changing environment of international air commerce
p0592 A78-52448
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
Remarks on future computational aerodynamics requirements --- government/industry relations
p0269 N78-19785

GRADIENTS
NT PRESSURE GRADIENTS

GRADIOMETERS
U MAGNETOMETERS

GRADUATION
U CALIBRATING

GRANULAR MATERIALS
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048

GRAPHITE
Carbon fiber study
[NASA-TM-79449] p0401 N78-24292
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065

GRAPHITE-EPOXY COMPOSITE MATERIALS
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943
Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints
p0077 A78-16907
An advanced composite wing for the F-16
p0077 A78-16920
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548

Application of composites on civil aircraft
p0218 A78-25199
S-3A composite spoiler in-service evaluation
p0219 A78-25209
low energy impact behavior of composite panels
p0339 A78-35397
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
Integrally stiffened laminate construction
p0370 A78-36431
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-145207] p0022 N78-10047
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-144984] p0044 N78-11199
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
Filament-winding fabrication of QCSEE configuration fan blades
[NASA-CR-135332] p0198 N78-16052
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
Composite hub/metal blade compressor rotor
[NASA-CR-135343] p0247 N78-18131
Advanced technology helicopter landing gear
[AD-A048891] p0261 N78-19124
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
Impact tests on fibrous composite sandwich structures
[NASA-TM-78719] p0631 N78-33152
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197

GRAVITATION
NT REDUCED GRAVITY

GRAVITATIONAL EFFECTS
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
Constant-control rolling maneuver
p0507 A78-46961

GRAVITY GRADIENT SATELLITES
NT ATS 5
NT ATS 6

GREASES
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072

GREAT LAKES (NORTH AMERICA)
NT LAKE ERIE

GREAT PLAINS CORRIDOR (NORTH AMERICA)
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692

GREEN FUNCTION
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Aerodynamic interference effects on tilting proprotor aircraft --- using the Green function method
[NASA-CR-152053] p0092 N78-13007
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070

GREEN THEOREM
U GREEN FUNCTION

GROOVES
Calculation of a double-thread groove seal
p0132 A78-20290

GROUND BASED CONTROL
NT AIR TRAFFIC CONTROL
NT RADAR APPROACH CONTROL
The technical potential of instrument landing systems in the present and in the future
[DGLR PAPER 77-019] p0189 A78-24412
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
The FIMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
Project Plan: Tower automated ground surveillance system development program
[AD-A051621] p0400 N78-24155
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas --- ground based control
[AD-A053938] p0452 N78-27106
Airport Surface Detection Equipment (ASDE-3) project plan
[AD-A052362] p0457 N78-27144
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073

GROUND EFFECT
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
Analysis of the influence of the OGE/IGE transition on VAK-191B flying qualities in hover
p0259 N78-19109
Prediction of aircraft sideline noise attenuation
[NASA-TM-78717] p0460 N78-27871
A theoretical investigation of ground effects on USB configurations
[NASA-CR-157355] p0499 N78-29086

GROUND EFFECT (AERODYNAMICS)
Some aspects of aircraft wake behavior near the ground
p0055 A78-14960
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
Asymptotic theory of a wing moving at small distances from a solid wall
p0133 A78-20462
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Modeling the influence of the ground effect on the aerodynamic characteristics of a wing by means of a flat screen of finite dimensions
p0174 A78-22634
Comments on 'Feasibility study of a hybrid airship operating in ground effect'
p0188 A78-24367
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand
p0333 A78-34161
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
The computation of the unsteady aerodynamics of bodies near a ground surface
p0373 A78-37408
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
The influence of V/STOL vehicle configuration variables on vectored jet induced flow fields in ground effect
[AIAA PAPER 78-1021] p0465 A78-43555
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
Conceptual design study of power augmented ram wing in ground effect aircraft
[AIAA PAPER 78-1466] p0512 A78-47915
Experimental determination of propulsion induced ground effects of typical three fan type A V/STOL configurations
[AIAA PAPER 78-1507] p0516 A78-47943
Modeling ground plane influence on wing aerodynamic characteristics using a finite plane screen

p0518 A78-48216
Asymptotic theory of a wing moving near a solid wall
p0518 A78-48248
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
Ground effects testing of two, three, and four jet configurations
[AIAA PAPER 78-1510] p0529 A78-49789
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
A minimum inductive resistance wing near the surface of the earth
[AD-A044690] p0082 N78-12042
The interference problem of the oscillating fuselage near ground
p0204 N78-17008
Aerodynamic characteristics in ground proximity
p0390 N78-24055

GROUND EFFECT MACHINES
NT CUSHIONCRAFT GROUND EFFECT MACHINE
An integrated system of control for hovercraft using differentially acting 'elevons'
p0333 A78-34012
A compass for the crystal ball --- naval research on surface and ground effect vehicles
p0429 A78-43225
Some nonlinear effects in stability and control of wing-in-ground effect vehicles
p0474 A78-44836
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
Duct effects on the dynamic fan characteristics of air cushion systems
[UTIAS-TN-211] p0081 N78-12030
Evaluation of a power-augmented-ram wing operating free in heave and pitch over water
[AD-A045428] p0093 N78-13021
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
The performance of a conceptual multimission power-augmented-ram wing-in-ground effect vehicle
[AD-A051433] p0359 N78-23064
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle
[PB-277674] p0395 N78-24099
The design and simulation of a takeoff stabilization system for an aircraft with an air cushion landing system
[AD-A053220] p0440 N78-26137
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
Pilot model air cushion vehicle (LACV-30) program
[AD-A053686] p0492 N78-28275
LACV-30 test and demonstration report --- air cushion vehicles
[AD-A053610] p0492 N78-28276
LACV-30 auxiliary power unit investigation
[AD-A053566] p0492 N78-28277

GROUND HANDLING
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
Low energy impact behavior of composite panels
p0339 A78-35397

GROUND OPERATIONAL SUPPORT SYSTEM
Test operations procedures physical characteristics aviation material
[AD-A053196] p0408 N78-25086

GROUND SPEED
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators --- wind shear
[AD-A049277] p0257 N78-19089
A preliminary study of the benefits of flying by ground speed during final approach
[NASA-TM-78777] p0608 N78-32076
Terrain Contour Matching (TERCOM): Sensitivity to heading and ground-speed errors
[AD-A056127] p0609 N78-32084

GROUND STATIONS
Access study and simulation of the Marots communication system
p0226 A78-27027
Flight tests of digital data transmission --- MSK - a quadrature PSK system
p0285 A78-31050
Microwave scanning beam landing system, ground station: Performance test report. Volume 1: Executive summary
[NASA-CR-151582] p0139 N78-14021
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075

GROUND SUPPORT EQUIPMENT
NT GROUND OPERATIONAL SUPPORT SYSTEM
Emissions control for ground power gas turbines
p0039 N78-11072
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
Precise enroute navigation based on ground-derived techniques
p0315 N78-21078
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115
Advanced technology servicing equipment for army aircraft
[AD-A052652] p0400 N78-24158

GROUND SUPPORT SYSTEMS
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342

GROUND TESTS
NT COLD FLOW TESTS
NT STATIC FIRING
Energy conservation in aeronautical ground testing
p0002 A78-11103
Testing a modern strike aircraft navigation system
p0175 A78-22852
Toward scramjet aircraft --- progress in engine development
p0177 A78-23421
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
Launching the Harrier from a ski jump
p0234 A78-28463
Verification of landing gear design strength
[SAE AIR 1494] p0472 A78-44701
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076

GROUND WIND
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110

GROUND-AIR-GROUND COMMUNICATIONS
Development of a Discrete Address Beacon System
[AD-A046580] p0139 N78-14029
A study of the economic impact of selected communications alternatives, present system definition

[AD-A052162] p0365 N78-23285
Aerosat communication management
p0365 N78-23307

GRUMMAN AIRCRAFT
NT A-6 AIRCRAFT
NT F-14 AIRCRAFT
NT F-111 AIRCRAFT
The aerodynamic vane control for V/STOL
p0110 A78-17895
Grumman's radio-controlled experimental air force
p0379 A78-38522
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109

GUIDANCE (MOTION)
NT AIRCRAFT GUIDANCE
NT BEAM RIDER GUIDANCE
NT INERTIAL GUIDANCE
NT LASER GUIDANCE
NT MAP MATCHING GUIDANCE
NT MIDCOURSE GUIDANCE
NT REENTRY GUIDANCE
NT RENDEZVOUS GUIDANCE
NT STRAPDOWN INERTIAL GUIDANCE
NT TERMINAL GUIDANCE
Applications of Advances in Navigation to Guidance and Control
[AGARD-CP-220] p0314 N78-21071
UHF DF triangulation system for control and guidance of military aircraft
p0315 N78-21077
Optimum horizontal guidance techniques for aircraft
p0356 N78-23016
Guidance and control design considerations for Low-Altitude and Terminal-Area Flight
[AGARD-CP-240] p0431 N78-26049
Guidance and control for low level offensive aircraft: A Royal Air Force view
p0431 N78-26050
Experimental determination of the navigation error of the 4-D navigation, guidance, and control systems on the NASA B-737 airplane
p0433 N78-26071

GUIDANCE SENSORS
The feasibility of an airborne thermal infrared position updating system
[AIAA 77-1477] p0005 A78-12234
A-6E TRAM --- Target Recognition Attack Multisensor system retrofit for all-weather operations
p0051 A78-13650
A multifunctional guidance and control system --- for CCV F-104G aircraft
p0064 A78-15640
Flight-control/navigation inertial reference system
p0065 A78-15642
Observational computation in the case of redundant measurements --- for position sensor data in radio navigation systems
p0176 A78-23133
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
Multi-Function Inertial Reference Assembly /MIRA/ update --- digital aircraft systems
p0535 A78-49941
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083

GUIDE VANES
NT JET VANES
The aerodynamic vane control for V/STOL
p0110 A78-17895
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
Use of leaning vanes in a two stage fan
[NASA-CP-152134] p0319 N78-21115
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131

GUNFIRE
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083

GUNNERY TRAINING
F-4E avionics update
[AD-A047949] p0243 N78-18061

GUNS (ORDNANCE)
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064

GUST ALLEVIATORS
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Gust-alleviation control systems for aircraft
p0470 A78-44397
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
Analytical study of a free-wing/free-trimmer concept --- for gust alleviation and high lift
[NASA-CR-2946] p0236 N78-18000
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
Open loop gust alleviation --- exemplified for DO-28 aircraft
[BMFT-FB-W-77-22] p0353 N78-22114
Direct lift control for flight path control and gust alleviation
p0434 N78-26072

GUST LOADS
Helicopter response in gusty winds about a building
p0055 A78-14954
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
Reliable lifting surface solutions for unsteady flow
[AIAA PAPER 78-228] p0161 A78-20757
Atmospheric turbulence loads on aircraft
p0175 A78-23049
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
An experiment on the gust response of a transport airplane by free-flight model
p0474 A78-44835
On the linear superposition of aerodynamic forces on wings in periodic gusts
p0510 A78-47869
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
Experimental investigation of gust response of hingeless helicopter rotors
[AD-A054752] p0552 N78-30142
Gust measurements and the N sub o problem
p0554 N78-30276
The YF-12 gust velocity measuring system
p0605 N78-32061
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692

GUSTS
Characterization of nonGaussian atmospheric turbulence for prediction of aircraft response

statistics
[NASA-CR-2913] p0197 N78-16044
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459
A non-Gaussian gust model for aircraft response analysis
[NOR-76-223] p0265 N78-19165
Airplane design for gusts
p0267 N78-19717

GYRATION
NT AUTOROTATION
NT PRECESSION

GYROCOMPASSES
Generalized algorithm of the analytical method of gyrocompassing
p0216 A78-25013
Gyroscopic instruments of orientation and stabilization systems --- Russian book
p0280 A78-29859

GYROPLANES
U HELICOPTERS

GYROS
U GYROSCOPES

GYROSCOPES
NT CONTROL MOMENT GYROSCOPES
NT GYROCOMPASSES
NT GYROSTABILIZERS
NT OPTICAL GYROSCOPES
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed sensors --- German book
p0228 A78-27383
Gyroscopic instruments of orientation and stabilization systems --- Russian book
p0280 A78-29859
Two extensions of a theorem of Levi-Civita to gyroscopic systems and some applications
p0570 A78-50311
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
Laser-gyro strapdown inertial system applications
p0439 N78-26130
A pyramid skewed axis sensor set for multiplex flight control systems
[ARC-R/M-3808] p0553 N78-30143

GYROSCOPIC DRIFT
U GYROSCOPES

GYROSTABILIZERS
Gyroscopic instruments of orientation and stabilization systems --- Russian book
p0280 A78-29859
Influence of constrained arrestors on the operation of gyroscopic stabilizers
p0585 A78-51355

GYROSTATS
U GYROSCOPES

H

H-53 HELICOPTER
Is production of the CH-53E helicopter warranted
[PB-278815/6] p0453 N78-27116

H-54 HELICOPTER
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879

HALL CURRENTS
U ELECTRIC CURRENT

HALOCARBONS
NT FLUOROCARBONS

HALOGEN COMPOUNDS
NT FLUORO COMPOUNDS
NT FLUOROCARBONS
NT FLUOROPOLYMERS

HALOGENATION
Halogenated solvent-induced corrosion in hydraulic systems --- hydraulic drives for aircraft radar antennas
[ASLE PREPRINT 78-AM-4A-2] p0378 A78-38083

HAMBURGER AIRCRAFT
NT HFB-320 AIRCRAFT

HAMBURGER HFB-320 AIRCRAFT
U HFB-320 AIRCRAFT

HAMILTONIAN FUNCTIONS
Two extensions of a theorem of Levi-Civita to gyroscopic systems and some applications
p0570 A78-50311

HANDBOOKS
NT USER MANUALS (COMPUTER PROGRAMS)
Stability and control flight test theory, volume 1
[AD-A042583] p0042 N78-11115
USAF bioenvironmental noise data handbook. Volume 83: KC-135A aircraft, near and far-field noise
[AD-A054138] p0495 N78-28893

HANDICAPS
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036

HANDLEY PAGE AIRCRAFT
NT HP-115 AIRCRAFT

HANDLEY PAGE HP-115 AIRCRAFT
U HP-115 AIRCRAFT

HANDLING EQUIPMENT
NT CRANES

HANDLING QUALITIES
U CONTROLLABILITY

HARDENING (MATERIALS)
NT HOT PRESSING
NT STRAIN HARDENING

HARMONIC ANALYSIS
PHAROS, processor for harmonic analysis of the response of oscillating surfaces --- Wind tunnel models
[NLR-MP-77012-U] p0238 N78-18019

HARMONIC MOTION
NT SIMPLE HARMONIC MOTION

HARMONIC OSCILLATION
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
A note on multicyclic control by swashplate oscillation
[NASA-TM-78475] p0323 N78-21159
Theoretical determination of subsonic oscillatory airforce coefficients
[ARC-R/M-3804] p0359 N78-23067

HARMONICS
NT HARMONIC OSCILLATION
NT SIMPLE HARMONIC MOTION

HARRIER AIRCRAFT
Advanced Harrier pushed for fleet use
p0069 A78-15877
YAV-8B/AV-8B advanced Harrier program
p0233 A78-28455
Launching the Harrier from a ski jump
p0234 A78-28463
Planning and procedures for aircraft demonstrations - V/STOL aircraft
p0380 A78-38749
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
Shipboard testing of the AV-8A Harrier
p0259 N78-19108

HASTELLOY (TRADEMARK)
Nickel brazing honeycomb for aircraft gas turbine engines
p0600 A78-53751

HAULING
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069

HAWKER P-1127 AIRCRAFT
U P-1127 AIRCRAFT

HAWKER SIDDELEY AIRCRAFT
NT HARRIER AIRCRAFT
NT P-1127 AIRCRAFT

HAZARDS
NT AIRCRAFT HAZARDS
NT FLIGHT HAZARDS
NT OPERATIONAL HAZARDS
NT RADIATION HAZARDS
NT TOXIC HAZARDS

HC-1 HELICOPTER
U CH-47 HELICOPTER
HEAD (PRESSURE)
U PRESSURE HEADS
HEAD-UP DISPLAYS
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
F-4E austere heads-up display/gunsight evaluation
p0124 A78-19434
In search of a better approach concept - MLS and HUD --- Head-Up Display/Microwave Landing System
p0134 A78-20479
The F-4E Austere HUD/Gunsight project
p0380 A78-38746
Improving the accuracy of HUD approaches in windshear with a new control law
[AIAA PAPER 78-1494] p0515 A78-47935
F-4E fire control system simulator, F-4E austere/heads up display (HUD), SEAFAC programs
[AD-A042255] p0031 N78-10124
Experimental testing of flight control head up displays
[NASA-TM-75205] p0208 N78-17053
A comparison of integrated and conventional cockpit warning systems --- pilot performance and reaction time in man machine systems
[AD-A048670] p0239 N78-18022
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064
A feasibility study of a manual bomb release while in a turn
[AD-A048882] p0261 N78-19123
Project plan for joint FAA/NASA head-up display concept evaluation
[NASA-TM-78512] p0495 N78-28979
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
Human factors engineering for head-up displays: A review of military specifications and recommendations for research
[AD-A056944] p0627 N78-33099
HEALTH
NT PUBLIC HEALTH
HEALTH PHYSICS
NT PUBLIC HEALTH
HEARING
NT ACOUSTIC FATIGUE
Research into effects of aircraft noise on hearing of children in exposed residential areas around an airport
p0117 A78-18779
HEAT BALANCE
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
HEAT CAPACITY
U SPECIFIC HEAT
HEAT CONDUCTION
U CONDUCTIVE HEAT TRANSFER
HEAT CONTENT
U ENTHALPY
HEAT DISSIPATION
U COOLING
HEAT DISSIPATION CHILLING
U COOLING
HEAT EFFECTS
U TEMPERATURE EFFECTS
HEAT EXCHANGERS
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
HEAT MEASUREMENT
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
HEAT PUMPS
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
HEAT REGULATION
U TEMPERATURE CONTROL
HEAT RESISTANCE
U THERMAL RESISTANCE
HEAT RESISTANT ALLOYS
NT TUNGSTEN ALLOYS
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 N78-24910
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
New production methods gain --- in engine manufacturing for U.S. aerospace industry
p0598 A78-53239
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109
Process and metallurgical factors in joining superalloys and other high service temperature materials
p0046 N78-11393
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73942] p0264 N78-19157
New materials for high temperature turbines: ONERA's DS composites confronted with the blade problems
p0321 N78-21139
FRS composites for advanced gas turbine engine components
[AD-A050595] p0355 N78-22165
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478
HEAT SHIELDING
NT REENTRY SHIELDING
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
HEAT SINKS
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32169
HEAT SOURCES
Downed Airman Power Source (DAPS) for inclusion into the RSSK-8A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044483] p0083 N78-12052
Downed Airman Power Source (DAPS) for inclusion into the RSSK-1A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044481] p0083 N78-12053
HEAT TESTS
U HIGH TEMPERATURE TESTS
HEAT TRANSFER
NT AERODYNAMIC HEAT TRANSFER
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT HYPERSONIC HEAT TRANSFER
NT RADIATIVE HEAT TRANSFER
NT SUPERSONIC HEAT TRANSFER
NT TURBULENT HEAT TRANSFER
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
All-Union Seminar on Inverse and Conjugate Problems of Heat Transfer, 2nd, Moscow, USSR, October 19-21, 1976, Proceedings
p0228 A78-27451
Some aspects of the thermal design of flight vehicles and processing of heat-test data
p0228 A78-27452
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455

Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer
p0420 A78-41512
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
Near-hole region heat transfer in full-coverage film cooling --- for high temperature gas turbines
p0573 A78-50579
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling performance
p0573 A78-50582
Impingement cooling and its application to combustor design
p0573 A78-50584
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309
Investigation of the heat regime of gas turbine engine bearings --- Russian book
p0598 A78-53431
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371

HEAT TRANSFER COEFFICIENTS
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
Investigations of the local heat transfer coefficient of a convection cooled rotor blade
p0319 N78-21126
Configuration heating for a hypersonic research airplane concept having a 70 deg swept double-delta wing
[NASA-TP-1143] p0366 N78-23389

HEAT TRANSMISSION
NT AERODYNAMIC HEAT TRANSFER
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT HEAT TRANSFER
NT HYPERSONIC HEAT TRANSFER
NT RADIATIVE HEAT TRANSFER
NT SUPERSONIC HEAT TRANSFER
NT TURBULENT HEAT TRANSFER

HEAT TREATMENT
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
Formation of residual stresses in the thermal strengthening of gas-turbine engine components
p0426 A78-42740
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199

HEATING
NT AERODYNAMIC HEATING
NT ARC HEATING
NT ATMOSPHERIC HEATING
NT GAS HEATING
NT KINETIC HEATING
NT TRANSIENT HEATING

HEATING EQUIPMENT
A modern warm fog dispersal system
p0056 A78-14994
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372

HEAVY LIFT HELICOPTERS
NT CH-62 HELICOPTER
DSTR/501-M62B dynamic interface critical speed problem
[AD-A042441] p0042 N78-11108
Heavy lift helicopter flight control system. Volume 2: Primary flight control system development and feasibility demonstration
[AD-A049580] p0323 N78-21163
Heavy lift helicopter flight control system. Volume 3: Automatic flight control system development and feasibility demonstration
[AD-A050059] p0324 N78-21164
HLH rotor blade manufacturing technology development report
[AD-A050592] p0349 N78-22081
Heavy lift helicopter flight control system. Volume 1: Production recommendations
[AD-A050618] p0353 N78-22113
Heavy lift helicopters. Advanced Technology component program: Hub and upper controls
[AD-A051348] p0396 N78-24122
Heavy lift helicopter - advanced technology component program - rotor blade
[AD-A053423] p0499 N78-29089
HLH drive system
[AD-A054024] p0500 N78-29094
Design and development of helicopter external cargo sling legs made with Kevlar
[AD-A056951] p0626 N78-33093

HEAVY LIFT LAUNCH VEHICLES
An experimental and analytical investigation of the hovering and forward flight characteristics of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075

HEIGHT
Problems in world-wide standardization of the units of height measurement
[AD-A051150] p0402 N78-24385

HELICAL ANTENNAS
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368

HELICAL WINDINGS
Braiding composites - Adapting the process for the mass production of aerospace components
p0077 A78-16904

HELICOPTER ATTITUDE INDICATORS
U ATTITUDE INDICATORS
U HELICOPTERS

HELICOPTER CONTROL
Automatic control of airplanes and helicopters --- Russian book
p0015 A78-12849
Helicopter response in gusty winds about a building
p0055 A78-14954
Aircraft display design using analytical pilot models
p0113 A78-18068
UTTAS testing
p0233 A78-28461
The helicopter as a control object --- Russian book
p0276 A78-29401
Sensitivity reduction in aircraft control systems
p0285 A78-31034
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
Piloting and control systems for airplanes and helicopters --- Russian book
p0485 A78-46565
Design and development of a multifunctional helicopter control system
p0524 A78-49396
Flight controls of Army/Hughes YAH-64 advanced attack helicopter
[AIAA 78-1237] p0540 A78-50160

Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
Three-cue helicopter flight director evaluation
[AD-A046261] p0143 N78-14058
Systematic investigation of models of helicopter with a slung load
p0149 N78-15026

HELICOPTER DESIGN
The attack helicopter Hughes YAH-64
p0003 A78-12035
Optimization of helicopter design. I
p0004 A78-12225
Helicopter manufacturing technology. II - Drive system and turbine engine technology
p0014 A78-12610
UTTAS/HLH rotor blade fabrication and testing --- YUH-61A and XCH-62A helicopters
p0050 A78-13456
Optimalization of helicopter design. II
p0053 A78-14085
Helicopters and energy savings
p0056 A78-15020
Reversing the trend of cockpit complexity with smart displays --- for helicopters
p0059 A78-15381
The design of aircraft and helicopter protection systems --- Russian book
p0070 A78-15937
Design and fabrication of an improved performance, low cost, composite main rotor blade for the Cobra helicopter
p0077 A78-16906
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
Sikorsky YUH-60A UTTAS helicopter flight test program
p0125 A78-19449
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes --- for helicopters
p0126 A78-19639
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
A superelement technique for designing helicopter fuselages
p0174 A78-22627
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
YAH-64 advanced attack helicopter design tradeoffs
[SAE PAPER 770950] p0178 A78-23801
The Bell Model 222 --- twin engine executive transport helicopter
[SAE PAPER 770951] p0179 A78-23802
Army UTTAS program --- UH-60A helicopter for Utility Tactical Transport Aircraft System
[SAE PAPER 770952] p0179 A78-23803
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
The Mi-6A helicopter --- Russian book
p0221 A78-26000
Black Hawk, Lamps and AAH
p0225 A78-26533
Flight evaluation of helicopter rotor isolation system
p0331 A78-33445
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
The quest for new technologies in the helicopter field
p0339 A78-35325
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
IDS - An advanced hingeless rotor system
p0372 A78-36950
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
Helicopter fuel economy evaluation
[SAE AS 1516] p0471 A78-44682
Dynamic stability of a helicopter carrying a suspended payload
[AIAA 78-1335] p0483 A78-46533
Superelement method for helicopter fuselage analysis
p0517 A78-48209
Flight controls of Army/Hughes YAH-64 advanced attack helicopter
[AIAA 78-1237] p0540 A78-50160
Helicopter manufacturing technology. III - Future manufacturing technologies
p0597 A78-53174
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Single bladed torqueless helicopter design
[AD-A045375] p0097 N78-13052
An assessment of some forms of follower-tooth reduction gear and its application to helicopter main rotor gearboxes
[RAE-TR-77040] p0150 N78-15035
Superelement method of designing a helicopter fuselage
p0206 N78-17043
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
A new helicostat from SNIAS helicopter division
[NASA-TM-75063] p0240 N78-18041
Advanced technology helicopter landing gear
[AD-A048891] p0261 N78-19124
Rotorcraft Design
[AGARD-CP-233] p0261 N78-19126
Long term experience with a hingeless/composite rotor
p0262 N78-19137
The Bell Model 222
p0263 N78-19138
The Sikorsky S-76 program
p0263 N78-19139
The AS 350 light helicopter
p0263 N78-19140
The Advancing Blade Concept (ABC) rotor program
p0263 N78-19143
Westland Wisp
p0264 N78-19149
Civil and military design requirements and their influence on the product
p0264 N78-19151
A technique for monitoring flight-test envelope expansion
[AD-A051163] p0361 N78-23083
Heavy lift helicopters. Advanced Technology component program: Hub and upper controls
[AD-A051348] p0396 N78-24122
Is production of the CH-53E helicopter warranted
[PB-278815/6] p0453 N78-27116
Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085

HELICOPTER ENGINES
Helicopter manufacturing technology. II - Drive system and turbine engine technology
p0014 A78-12610
Aircraft and helicopter engines - Fundamentals of design and flight operations --- Russian book
p0059 A78-15222
Research needs for U.S. Army aircraft propulsion
[AIAA PAPER 78-45] p0171 A78-22558
DSTR/501-M62B dynamic interface critical speed problem
[AD-A042441] p0042 N78-11108
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
HLH drive system
[AD-A054024] p0500 N78-29098

Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114
HELICOPTER PERFORMANCE
The attack helicopter Hughes YAH-64
p0003 A78-12035
The employment of helicopters in construction engineering and assembly operations in the German Democratic Republic
p0050 A78-13498
Analysis of aviation accidents with light planes and helicopters
p0053 A78-14084
The analysis of helicopter rotor noise
p0059 A78-15295
Helicopter TF radar Pavelow III
p0068 A78-15697
In-flight measurement of aircraft acoustic signals
p0105 A78-17364
An appreciation of the dynamic problems associated with the external transportation of loads from a helicopter - State of the art
p0114 A78-18429
DFVLR studies on rotary-wing flight mechanics
p0114 A78-18502
The Mi-6A helicopter --- Russian book
p0221 A78-26000
Black Hawk, Lamps and AAH
p0225 A78-26533
OTTAS testing
p0233 A78-28461
Helicopters: Calculation of integral aerodynamic performance and air-technical data --- Russian book
p0281 A78-30124
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038
A theoretical study of the effect of blade ice accretion on the power-off landing capability of a Wessex helicopter
p0372 A78-36948
Helicopter flight demonstration
p0380 A78-38750
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189
A systems approach to heliport lighting
p0523 A78-49238
LOGMOD - The fault-isolator --- for helicopter electronic systems
p0523 A78-49239
Stability of a helicopter carrying an underslung load
p0524 A78-49398
The helicopter operators' viewpoint --- airspace operational environments and requirements
p0594 A78-52955
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
Single bladed torqueless helicopter design
[AD-A045375] p0097 N78-13052
Icing problems on helicopter rotors
[BP59303] p0140 N78-14032
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
Stability of helicopter slung loads
[ARL/AERO-NOTE-364] p0196 N78-16040
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
Feasibility study of negative lift circumferential type seal for helicopter transmissions
[NASA-CR-135302] p0212 N78-17390
A new helicostat from SNIAS helicopter division
[NASA-TM-75063] p0240 N78-18041
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Rotorcraft Design
[AGARD-CP-233] p0261 N78-19126
British Military helicopter programmes
p0262 N78-19130
Some aspects of offshore operations in the Netherlands
p0262 N78-19135
The Bell Model 222
p0263 N78-19138
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113
Limitations of the OTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
Evaluation of a circulation control tail boom for yaw control --- OH-6 helicopter
[AD-A055116] p0564 N78-31119
HELICOPTER PROPELLER DRIVE
Helicopter manufacturing technology. II - Drive system and turbine engine technology
p0014 A78-12610
A new chip detector --- component failure detection in aircraft and helicopter propulsion and transmission systems
p0058 A78-15158
HELICOPTER ROTORS
U ROTARY WINGS
HELICOPTER TAIL ROTORS
The use of composites in class 1 structures in helicopters --- for rotor blades
p0105 A78-17254
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
HELICOPTER WAKES
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage --- conducted in the Langley V/STOL wind tunnel
[NASA-TM-74033] p0604 N78-32049
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
HELICOPTERS
NT AH-64 HELICOPTER
NT BO-105 HELICOPTER
NT CH-47 HELICOPTER
NT CH-62 HELICOPTER
NT H-53 HELICOPTER
NT H-54 HELICOPTER
NT HEAVY LIFT HELICOPTERS
NT MILITARY HELICOPTERS
NT OH-6 HELICOPTER
NT OH-58 HELICOPTER
NT RIGID ROTOR HELICOPTERS
NT SE-3160 HELICOPTER
NT SH-3 HELICOPTER
NT UH-1 HELICOPTER
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
The Mi-6A helicopter --- Russian book
p0221 A78-26000
The Aerospatiale helicopter factory at Marignane
p0231 A78-28194
A theoretical technique for analyzing aeroelastic stability of bearingless rotors
[AIAA 78-503] p0279 A78-29805
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
Vibration in helicopters
p0331 A78-33444
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959

A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
Compressible flow about helicopter rotors
p0372 A78-36947
The role of meteorology in helicopter icing problems
p0376 A78-37712
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
VALT parameter identification flight test --- VTOL Approach and Landing Technology
p0480 A78-45439
Measurement of vibratory displacements of a rotating blade
p0524 A78-49397
Helicopter rotor vibration isolation
p0524 A78-49399
Preventing helicopter mid-air collisions with the proximity warning device
p0585 A78-51223
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
Investigation of the compliant rotor concept
[AD-A042338] p0022 N78-10051
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
An analysis of the flutter and damping characteristics of helicopter rotors
p0030 N78-10111
The determination of some requirements for a helicopter flight research simulation facility
[NASA-CR-152066] p0030 N78-10117
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
Computing internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter low glare canopy design
[AD-A043367] p0032 N78-10873
Single bladed torqueless helicopter design
[AD-A045375] p0097 N78-13052
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 1: Materials, design and test
[AD-A046176] p0140 N78-14037
Systematic investigation of models of helicopter with a slung load
p0149 N78-15026
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process specifications
[AD-A046279] p0149 N78-15032
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037
Evaluation of slimpack style parachute in CT4A airtrainer aircraft
[AD-A047083] p0195 N78-16024
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
Quiet propeller/rotor concept evaluation --- of the UH-1 helicopter
[AD-A047297] p0197 N78-16047
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
Icing on helicopters
[RAE-LIB-TRANS-1911] p0257 N78-19095
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
Advanced technology helicopter landing gear
[AD-A048891] p0261 N78-19124
British Airways helicopter operations
p0262 N78-19133
Air-sea rescue operations. Search and rescue experience
p0262 N78-19134
Some aspects of offshore operations in the Netherlands
p0262 N78-19135
Combined military and commercial application of light helicopters
p0262 N78-19136
The Bell Model 222
p0263 N78-19138
Tethered RPV-rotorcraft
p0263 N78-19141
DFVLR rotorcraft research
p0263 N78-19146
ONERA aerodynamic research work on helicopters
p0264 N78-19148
Gondola system for helicopter transport of external cargo
[AD-A047560] p0306 N78-20120
AH-1S high-survivable transmission system
[AD-A047558] p0307 N78-20123
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
A life cycle cost study of contractor versus organic support of aircraft programs
[AD-A049438] p0312 N78-21045
Research requirements to improve reliability of civil helicopters
[NASA-CR-145335] p0316 N78-21093
Optimal control theory (OWEM) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
HF radiation characteristics of the RH-53D helicopter and the Mark 105 AMCM system
[AD-A049795] p0325 N78-21358
Engineering services to conduct qualification testing of precision forged spiral bevel gears
[AD-A051542] p0366 N78-23438
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 1: Summary report
[AD-A051318] p0396 N78-24118
Finite element analysis for complex structures, helicopter transmission housing structural modeling
[AD-A052759] p0397 N78-24126
Helicopters and energy savings
[AAAF-NT-77-25] p0397 N78-24128
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
Advanced technology servicing equipment for army aircraft
[AD-A052652] p0400 N78-24158
Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] p0402 N78-24515
Advanced overrunning clutch technology --- for use in helicopters
[AD-A052635] p0403 N78-24557
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
A review of the literature on electro-optical flight displays

[AD-A053310] p0440 N78-26141
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084
Emergency and microfog lubrication and cooling of bearings for Army helicopters
[NASA-CR-135195] p0459 N78-27429
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
Approaches to combat damage repair
p0491 N78-28089
A subjective field study of helicopter blade-slap noise
[NASA-TM-78758] p0494 N78-28680
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Structural dynamics, stability, and control of helicopters
[NASA-CR-158909] p0552 N78-30139
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
Dynamic analysis using superelements for a large helicopter model
p0617 N78-32486
Helicopter Acoustics
[NASA-CP-2052-PT-1] p0618 N78-32816
Helicopter external noise requirements: FAA perspective
p0618 N78-32817
Helicopter noise regulations: An industry perspective
p0618 N78-32818
The impact of urban operations on helicopter noise requirements
p0619 N78-32820
Prediction and reduction of rotor broadband noise
p0619 N78-32821
Theoretical models of helicopter rotor noise
p0619 N78-32822
Noise due to rotor-turbulence interaction
p0619 N78-32823
Theory on acoustic sources
p0619 N78-32824
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
Helicopter noise research at the langley V/STOL tunnel
p0619 N78-32826
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise --- langley anechoic noise facility
p0620 N78-32827
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
Helicopter external noise prediction and correlation with flight test
p0620 N78-32829
Full-scale testing of an Ogee tip rotor --- in the langley whirl tower
p0620 N78-32830
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
Improved methods for calculating the thickness noise
p0620 N78-32832
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
A study of the noise radiation from four helicopter rotor blades --- tests in Ames 40 by 20 foot wind tunnel
p0621 N78-32835

HELIPORTS
Helicopter response in gusty winds about a building
p0055 A78-14954
A systems approach to heliport lighting
p0523 A78-49238
The helicopter operators' viewpoint --- airspace operational environments and requirements
p0594 A78-52955
The impact of urban operations on helicopter noise requirements
p0619 N78-32820

HELIX TUBES
U TRAVELING WAVE TUBES

HELMETS
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
Visually Activated Switching System --- using helmet-mounted IR transmitter for avionics control
p0067 A78-15669
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672

HERCULES AIRCRAFT
U C-130 AIRCRAFT

HERMITIAN POLYNOMIAL
Hermite closed splines
p0527 A78-49713

HFB-320 AIRCRAFT
Determination of flight-tracking controllers using Solheim's pole-shifting method --- for HFB-320 airbus
p0074 A78-16415

HHX HELICOPTER
U H-53 HELICOPTER

HIGH ACCELERATION
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
A technique for the assessment of fighter aircraft precision controllability
[AIAA 78-1364] p0484 A78-46553
High acceleration cockpit simulator evaluation
[AD-A045165] p0100 N78-13081

HIGH ALTITUDE
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
Development of an ultra high level airdrop container concept
[AD-A046156] p0138 N78-14017
High-altitude area navigation (RNAV) enroute simulation
[AD-A049315] p0257 N78-19088
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040

HIGH ALTITUDE BALLOONS
NT SKYHOOK BALLOONS
NT SUPERPRESSURE BALLOONS
185 W/kg solar array for naval sea control systems
p0002 A78-10964
Aerodynamic hull design for HASPA LTA optimization --- High Altitude Superpressure Powered Aerostat Lighter Than Air
p0517 A78-48100
A new helicostat from SNIAS helicopter division
[NASA-TM-75063] p0240 N78-18041

HIGH ALTITUDE ENVIRONMENTS
Radiation safety in high-altitude air traffic
p0071 A78-16184
The High Altitude Pollution Program
[UCRL-50042-77] p0617 N78-32601

HIGH ALTITUDE FLIGHT
U HIGH ALTITUDE

HIGH ALTITUDE TESTS
Area navigation - Fast-time/real-time simulations in a high-altitude center environment
p0596 A78-52977

HIGH ASPECT RATIO
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload

p0128 A78-19693
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
Development of low sweep, high aspect ratio wings designed for high Reynolds number
p0477 A78-45233
Ballooning stability boundaries for the large-aspect-ratio tokamak
p0599 A78-53664
Control-surface hinge-moment calculations for a high-aspect-ratio supercritical wing
[NASA-TM-78664] p0557 N78-31043
HIGH ASPECT RATIO WINGS
U SLENDER WINGS
HIGH FIELD MAGNETS
Electric flight control systems - Applicable now
p0067 A78-15688
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
HIGH FREQUENCIES
High frequency dynamic engine simulation --- TF-30 engine
[NASA-CR-135313] p0097 N78-13059
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case --- satellite and aircraft antennas
p0248 N78-18290
HF radiation characteristics of the RH-53D helicopter and the Mark 105 AMCM system
[AD-A049795] p0325 N78-21358
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case --- satellite and aircraft antennas
[ESA-TT-435] p0365 N78-23310
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
HIGH GAIN
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] p0210 N78-17070
HIGH GRAVITY (ACCELERATION)
U HIGH GRAVITY ENVIRONMENTS
HIGH GRAVITY ENVIRONMENTS
The design of a high g cockpit
p0550 N78-30118
HIGH MELTING COMPOUNDS
U REFRACTORY MATERIALS
HIGH PRESSURE
Use of leaning vanes in a two stage fan
[NASA-CR-152134] p0319 N78-21115
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
HIGH RESOLUTION
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
HIGH SPEED
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
Aircraft configurations for high-speed ships
[AD-A055540] p0610 N78-32092
HIGH SPEED FLIGHT
U HIGH SPEED
HIGH SPEED TRANSPORTATION
U RAPID TRANSIT SYSTEMS
HIGH STRENGTH
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
HIGH STRENGTH ALLOYS
NT HIGH STRENGTH STEELS
NT MARAGING STEELS
Heat-resistant equipment for bending shaped material with electrical heating
[AD-A045909] p0145 N78-14411
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
HIGH STRENGTH STEELS
NT MARAGING STEELS
A method of predicting stress corrosion cracking
p0068 A78-44105
Extending the service life of aircraft components made of high-strength steels --- Russian book
p0522 A78-48518
HIGH TEMPERATURE
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
High temperature corrosion-resistant protective coatings in stationary gas turbines
[NASA-TM-75181] p0086 N78-12080
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235
High temperature problems in gas turbine engines
[AGARD-CP-229] p0319 N78-21118
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
HIGH TEMPERATURE AIR
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
HIGH TEMPERATURE ALLOYS
U HEAT RESISTANT ALLOYS
HIGH TEMPERATURE ENVIRONMENTS
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
Problems concerning high temperatures in small turbomachines
p0319 N78-21121
Measuring techniques in high temperature turbines
p0322 N78-21151
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
HIGH TEMPERATURE FLUIDS
NT HIGH TEMPERATURE AIR
HIGH TEMPERATURE GASES
NT HIGH TEMPERATURE AIR
HIGH TEMPERATURE MATERIALS
U REFRACTORY MATERIALS
HIGH TEMPERATURE TESTS
The design and performance of high temperature turbines in turbofan engines
p0112 A78-18023
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys

p0427 A78-43015
Experimental verification of a blade cooling system and comparison with design calculation --- in high temperature test turbine
p0573 A78-50583
HIGH VOLTAGES
High-voltage power supply problems and design techniques
p0065 A78-15654
HIGHWAYS
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183
HILLER MILITARY AIRCRAFT
U MILITARY AIRCRAFT
HINDRANCE
U CONSTRAINTS
HINGE MOMENTS
U TORQUE
HINGED ROTOR BLADES
U ROTARY WINGS
HINGELESS ROTORS
U RIGID ROTORS
HISTORIES
NT CASE HISTORIES
HLLV
U HEAVY LIFT LAUNCH VEHICLES
HO-6 HELICOPTER
U OH-6 HELICOPTER
HODOGRAPHS
Calculation of supercritical flow past a double wedge by Telenin's method
p0011 A78-12301
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
Obtaining exact solutions for shock-free flow past a symmetrical airfoil profile with a local supersonic zone
p0127 A78-19668
Collection of supercritical aerofoils obtained with the NLR hodograph method
[NLR-TR-75115-U] p0237 N78-18009
Design and analysis of a hodograph method for the calculation of supercritical shock-free aerofoils
[NLR-TR-77046-U] p0488 N78-28059
HOLDERS
NT FLAME HOLDERS
HOLE DISTRIBUTION (MECHANICS)
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes --- for high temperature gas turbine blades
p0573 A78-50578
Near-hole region heat transfer in full-coverage film cooling --- for high temperature gas turbines
p0573 A78-50579
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
HOLES
Analytical representation of the initial quality of fastener holes --- for aircraft structures
p0217 A78-25180
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
HOLLAND
U NETHERLANDS
HOLOGRAMMETRY
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
HOLOGRAPHIC INTERFEROMETRY
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Holographic inspection of jet engine composite fan blades
[SAE PAPER 770975] p0179 A78-23819
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
HOLOGRAPHY
Optical simulator with a holographic component --- infinity display system
[AIAA 78-1581] p0579 A78-50671
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
HOMING DEVICES
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
HONDURAS
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
HONEYCOMB CORES
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
HONEYCOMB STRUCTURES
NT HONEYCOMB CORES
A new method for cutting honeycomb and composite materials for structural members
p0077 A78-16875
Transport construction costs studied --- composite materials use in aircraft for cost reduction
p0078 A78-17129
Today's non-metallic composite airframe structure - An airline assessment
p0218 A78-25196
C-141A service experience - Materials and processes
p0219 A78-25207
Nickel brazing honeycomb for aircraft gas turbine engines
p0600 A78-53751
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands --- gas turbine engines
[NASA-CR-135307] p0459 N78-27427
HORIZON
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
HORIZONTAL FLIGHT
A relative motion analysis of horizontal collision avoidance
p0387 A78-39674
HORIZONTAL STABILIZERS
U STABILIZERS (FLUID DYNAMICS)
HORIZONTAL TAIL SURFACES
Optimum tail plane design for artificially stabilized aircraft
p0276 A78-29334
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394
Design of a horizontal tail unit and related adjustments
p0527 A78-49736
Calculation of horizontal tail loads in maneuvering flight
[DLR-IB-536-76/4] p0137 N78-14003
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane
[VTH-LR-226] p0148 N78-15019
Calculation of the horizontal tail loads from elevator actuation
[DLR-IB-536-76/4] p0238 N78-18011
HOSES
Fire testing of flexible hose, tube assemblies, coils, fittings and similar system components
[SAE AS 1055B] p0471 A78-44681
HOT AIR
U HIGH TEMPERATURE AIR
HOT CYCLE PROPULSION SYSTEM
U TIP DRIVEN ROTORS
HOT FORMING
U HOT WORKING
HOT JET EXHAUST
U JET EXHAUST
HOT JETS
U JET FLOW

HOT PRESSING
Manufacture of titanium components by hot isostatic pressing
p0013 A78-12456
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
HOT WORKING
Heat-resistant equipment for bending shaped material with electrical heating
[AD-A045909] p0145 N78-14411
HOT-FILM ANEMOMETERS
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
HOT-WIRE ANEMOMETERS
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Features of unsteady flows over airfoils
p0346 N78-22054
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
HOT-WIRE TURBULENCE METERS
U TURBULENCE METERS
HOTSHOT WIND TUNNELS
Pulse tubes for aerodynamic studies --- Russian book
p0415 A78-40298
HOUSINGS
NT COWLINGS
NT RADOMES
Development of a frangible approach light
[AD-A043859] p0043 N78-11122
HOVERCRAFT
U GROUND EFFECT MACHINES
HOVERING
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
Unsteady hovering wake parameters identified from dynamic model tests
p0203 N78-16992
An experimental and analytical investigation of the hovering and forward flight characteristics of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075
Analysis of the influence of the OGE/IGE transition on VAK-191B flying qualities in hover
p0259 N78-19109
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
HOVERING STABILITY
Aerodynamic and hovering control of LTA vehicles --- airship configurations
[AD-A045315] p0082 N78-12047
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
V/STOL hover stability impact on hover control task
p0258 N78-19102
Optimal control theory (OWEN) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
HP-115 AIRCRAFT
Vortex breakdown. Some observations in flight on the HP 115 aircraft
[ARC-R/M-3805] p0359 N78-23068
HSS-2 HELICOPTER
U SH-3 HELICOPTER
HU-1 HELICOPTER
U UH-1 HELICOPTER
HUBS
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
Heavy lift helicopters. Advanced Technology component program: Hub and upper controls
[AD-A051348] p0396 N78-24122
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
HUGHES AIRCRAFT
NT AH-64 HELICOPTER
NT OH-6 HELICOPTER
The US Army UTTAS and AAH programs
p0262 N78-19131
HUGHES MILITARY AIRCRAFT
U HUGHES AIRCRAFT
U MILITARY AIRCRAFT
HULLS (STRUCTURES)
Aerodynamic hull design for HASPA LTA optimization --- High Altitude Superpressure Powered Aerostat Lighter Than Air
p0517 A78-48100
Ride characteristics of catamaran sea loiter aircraft in a seaway
[AD-A045363] p0096 N78-13048
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta --- hull temperature, flight data, operational problems
[DLR-IB-536-77/1] p0238 N78-18012
HUMAN ENGINEERING
U HUMAN FACTORS ENGINEERING
HUMAN FACTORS ENGINEERING
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
Reversing the trend of cockpit complexity with smart displays --- for helicopters
p0059 A78-15381
Warning and marking colours on the apron
p0072 A78-16278
Lighting in airport terminals
p0072 A78-16279
Aircraft display design using analytical pilot models
p0113 A78-18068
Advanced flight decks for the 80s --- cockpit design for transport aircraft
p0273 A78-28835
Ergonomics in commercial aircraft landing
p0371 A78-36621
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
Model of aircraft passenger acceptance
p0526 A78-49684
A review of human factors investigation studies in aircraft accidents during the period 1957-1977 in Aeromedical Laboratory, JASDF
p0587 A78-51497
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111

Evaluation of jet 2 inch standby flight instrument system
[AD-A051798] p0361 N78-23087
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075
Human factors engineering for head-up displays: A review of military specifications and recommendations for research
[AD-A056944] p0627 N78-33099
Development of a symbology exerciser for display generation and analysis on the visually-coupled airborne systems simulator (VCASS)
[AD-A055464] p0630 N78-33124

HUMAN PERFORMANCE
NT ASTRONAUT PERFORMANCE
NT PILOT PERFORMANCE
Operator work capacity during parachutist free-fall
p0517 A78-47978
Environmental Pollution. Noise pollution-noise effects on human performance
[AD-A041600] p0145 N78-14691
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992

HUMAN REACTIONS
Current problems of flight simulators for research
p0275 A78-29214
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058
Concorde - Ride quality and passenger reactions
p0418 A78-41166
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
Model of aircraft passenger acceptance
p0526 A78-49684
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport
[TT-77051] p0556 N78-30910
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615

HUMAN TOLERANCES
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673

HUMIDITY
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100

HYBRID COMPUTERS
Main characteristics of the ADT 4000-4100 digital computer for a hybrid computing system --- for jet engine simulation
p0277 A78-29589
Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783

HYBRID NAVIGATION SYSTEMS
Navigation procedure - Present systems and development trends
[DGLR PAPER 77-018] p0189 A78-24411

HYBRID PROPELLANTS
Boron combustion in combinatory propulsion
[ESA-TT-462] p0365 N78-23258

HYDRAULIC ACTUATORS
U ACTUATORS
U HYDRAULIC EQUIPMENT

HYDRAULIC ANALOGIES
Flow in a hydraulic model of an axial turbomachine
[ONERA, TP NO. 1977-157] p0075 A78-16619

HYDRAULIC CONTROL
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
Properties of hydraulic servomotor controlled by flapper valve or by edge valve --- turbojet engine system
p0277 A78-29587

HYDRAULIC EQUIPMENT
NT AIRCRAFT HYDRAULIC SYSTEMS
F-16's ISAs reduce cost, weight, and leakage --- hydraulic integrated servoactuators for flight control
p0108 A78-17737
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
Hydraulic constant recoil program
[AD-A049313] p0267 N78-19517
Evaluation of a lip-seal hydraulic fitting for the F-14 aircraft
[AD-A051159] p0396 N78-24120

HYDRAULIC FLUIDS
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs
[AD-A046824] p0153 N78-15287

HYDRAULIC HEATING SOURCES
U HEAT SOURCES
U HYDRAULIC EQUIPMENT

HYDRAULIC PUMPS
U HYDRAULIC EQUIPMENT

HYDRAULIC SYSTEMS
U HYDRAULIC EQUIPMENT

HYDRAULIC TEST TUNNELS
Flow in a hydraulic model of an axial turbomachine
[ONERA, TP NO. 1977-157] p0075 A78-16619
Water-tunnel experiments on an oscillating airfoil at RE equals 21,000
[NASA-TM-78446] p0253 N78-19058

HYDRAULIC VALVES
U HYDRAULIC EQUIPMENT
U VALVES

HYDRAZINES
Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107

HYDRIDES
NT ALUMINUM BOROHYDRIDES

HYDROAERODYNAMICS
U AERODYNAMICS

HYDROCARBON COMBUSTION
Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor
p0330 A78-33114
Combustion performance of gas turbine combustors burning alternative fuels
[AIAA PAPER 78-1000] p0465 A78-43547
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560

HYDROCARBON FUELS
NT DIESEL FUELS
NT FOSSIL FUELS

NT JET ENGINE FUELS
NT JP-4 JET FUEL
NT JP-5 JET FUEL
Alternative hydrocarbon fuels for aviation
p0060 A78-15400
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
Jet aircraft hydrocarbon fuels technology
[NASA-CP-2033] p0266 N78-19325
Characteristics and combustion of future hydrocarbon fuels --- aircraft fuels
[NASA-TM-78865] p0401 N78-24370
HYDROCARBONS
NT LIQUEFIED NATURAL GAS
NT METHANE
NT PROPANE
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
[NASA-TM-73829] p0101 N78-13233
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098
HYDRODYNAMIC EQUATIONS
Construction of a mathematical model of a jet engine for analyzing transient flows
p0167 A78-20971
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
HYDRODYNAMIC STABILITY
U FLOW STABILITY
HYDRODYNAMICS
Some specific hydrodynamic and aerodynamic problems of surface-effect ships with sidewalls
p0286 A78-31126
Factorization methods in hydroaeromechanics --- Russian book
p0378 A78-37887
Some problems of continuum mechanics --- Russian book
p0580 A78-50751
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
HYDROFOIL BOATS
U HYDROFOIL CRAFT
HYDROFOIL CRAFT
Aircraft operating environments around high speed ships --- RPV feasibility for hydrofoil ships
[AIAA PAPER 78-1184] p0422 A78-41877
A compass for the crystal ball --- naval research on surface and ground effect vehicles
p0429 A78-43225
HYDROFOILS
Mixed ventilated foils --- design for immersed hydrofoils
p0286 A78-31127
Isoperimetric problems of the theory of supercavitated mechanisms
p0477 A78-45172
HYDROGEN
NT LIQUID HYDROGEN
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
Hydrogen content of hydrocarbon fuels by a low-resolution nuclear resonance method
[AD-A054465] p0503 N78-29262
HYDROGEN COMPOUNDS
NT ALUMINUM BOROHYDRIDES
HYDROGEN EMBRITTLEMENT
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys
p0427 A78-43015
HYDROGEN ENGINES
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
HYDROGEN FUELS
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Hydrogen fueled subsonic aircraft - A prospective
p0118 A78-18843
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
HYDROGEN-BASED ENERGY
Where aerospace can serve afresh - Paths to energy independence
p0177 A78-23420
HYDROGENATION
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
HYDROKINETICS
U HYDROMECHANICS
HYDROMAGNETIC STABILITY
U MAGNETOHYDRODYNAMIC STABILITY
HYDROMECHANICS
NT HYDRODYNAMICS
Hydromechanical properties of an isolated wing moving above a screen
[AD-A044692] p0091 N78-12379
HYDROXYL COMPOUNDS
NT PHENOLS
HYPERBOLAS
The use of Doppler-shift position lines in satellite navigation systems
p0590 A78-51890
HYPERBOLIC NAVIGATION
NT DECCA NAVIGATION
NT LORAN
NT LORAN C
HYPERSONIC AIRCRAFT
Calculated heating on the afterbody nozzle of a hypersonic aircraft concept
p0072 A78-16186
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Toward scramjet aircraft --- progress in engine development
p0177 A78-23421
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
Structural analysis of ultra-high speed aircraft structural components
[NASA-CR-155334] p0101 N78-13476
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft
[NASA-CR-144863] p0310 N78-20534
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045

HYPERSONIC BOUNDARY LAYER
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
An experimental study of boundary layer transition on a caret wing at hypersonic speeds
p0417 A78-41029
Investigations of the intensity of oscillations of the boundary of a turbulent wake
p0586 A78-51402
HYPERSONIC FLIGHT
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
HYPERSONIC FLOW
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Asymptotic theory of the onset of separation at a flap on a cooled body situated in hypersonic flow under conditions of weak hypersonic interaction
p0128 A78-19671
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
Three-dimensional hypersonic gas flow past a thin wing
p0163 A78-20795
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
Characteristics of the jet acceleration of a flow to hypersonic speeds
p0166 A78-20953
Hypersonic gas flow past a flat delta wing
p0166 A78-20966
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
Entropy layer in two-dimensional flows --- hypersonic ideal gas flow behind shock wave
p0168 A78-21132
Hypersonic flow past a conical wing with detached shock wave at the leading edges
p0169 A78-22078
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation --- German book
p0175 A78-22937
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
Three-dimensional flow of hypersonic gas past a thin airfoil
p0281 A78-30002
Measurement of momentum transport to surfaces of different form in a hypersonic free-molecular stream
p0335 A78-34448
Local method in rarefied gas aerodynamics
p0380 A78-38726
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
Unsteady hypersonic gas flow past a thin wing of finite span
p0529 A78-49792
Contribution to the theory of three-dimensional hypersonic viscous gas flow past blunted bodies in the presence of injection
p0580 A78-50757
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
Application of hypersonic favorable aerodynamic interference concepts to supersonic aircraft
[AIAA PAPER 78-1458] p0591 A78-52042
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009
Hypersonic flows
p0613 N78-32124
HYPERSONIC HEAT TRANSFER
Hypersonic heat transfer test program in the VKI longshot facility --- ogive body configuration
[AD-A050295] p0302 N78-20086
HYPERSONIC NOZZLES
Hypersonic flow of a viscous gas in a nozzle
p0127 A78-19651
HYPERSONIC REENTRY
Investigation of a side force due to ablation --- reentry vehicle spin dynamic stability tests
p0571 A78-50457
Calculation of viscous radiant gas flows --- hypersonic reentry
p0599 A78-53556
HYPERSONIC SPEED
Influence of slip on the aerodynamic behavior of a wing at hypersonic speeds
p0342 A78-35916
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
HYPERSONIC VEHICLES
NT HYPERSONIC AIRCRAFT
NT LIFTING REENTRY VEHICLES
Generalized area rules and integral theorems for hypersonic wing-bodies
p0571 A78-50461
Configuration heating for a hypersonic research airplane concept having a 70 deg swept double-delta wing
[NASA-TP-1143] p0366 N78-23389
HYPERSONIC WAKES
Laminar hypersonic wake of a lifting body
p0426 A78-42763
HYPERSONIC WIND TUNNELS
NT CASCADE WIND TUNNELS
NT HOTSHOT WIND TUNNELS
NT SHOCK TUNNELS
Pulse tubes for aerodynamic studies --- Russian book
p0415 A78-40298
HYPERVELOCITY CRATERING
U HYPERVELOCITY PROJECTILES
HYPERVELOCITY IMPACT
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
HYPERVELOCITY PROJECTILES
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
HYPERVELOCITY WIND TUNNELS
NT CASCADE WIND TUNNELS
NT HOTSHOT WIND TUNNELS
NT SHOCK TUNNELS
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
HYPOTHESES
NT VORTICITY TRANSPORT HYPOTHESIS
HYSTERESIS
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073

I

IBM COMPUTERS
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
ICE
NT SEA ICE
ICE FORMATION
A theoretical study of the effect of blade ice accretion on the power-off landing capability of a Wessex helicopter
p0372 A78-36948
The role of meteorology in helicopter icing problems
p0376 A78-37712
Icing problems on helicopter rotors
[BR59303] p0140 N78-14032
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
Icing on helicopters
[RAE-LIB-TRANS-1911] p0257 N78-19095
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
Technical evaluation report on the 51st (A) Specialists' Meeting of the Propulsion and Energetics Panel on Icing Testing for Aircraft Engines
[AGARD-AR-124] p0612 N78-32105
ICE PACKS
U SEA ICE
ICE PREVENTION
The design of aircraft and helicopter protection systems --- Russian book
p0070 A78-15937
Engineering summary of powerplant icing technical data
[AD-A045087] p0087 N78-12087
ICING
U ICE FORMATION
IDEAL FLUIDS
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752
IDEAL GAS
Entropy layer in two-dimensional flows --- hypersonic ideal gas flow behind shock wave
p0168 A78-21132
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
Calculations of flows in flat asymmetric nozzles for overexpanded conditions
p0581 A78-50782
IFR (RULES)
U INSTRUMENT FLIGHT RULES
IGNITION
NT SPARK IGNITION
Ignition of a liquid fuel under high intensity radiation --- laser weapon systems
[AD-A054974] p0614 N78-32199
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235
IGNITION LIMITS
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568
IGNITION TEMPERATURE
NT FLASH POINT
IL-62 AIRCRAFT
The technical conception of the IL-62M. VII - landing flap control
p0051 A78-13503
The technical concepts behind the IL-62M /8/ landing gear
p0371 A78-36622
ILLIAC COMPUTERS
NT ILLIAC 4 COMPUTER
ILLIAC 4 COMPUTER
Solution of multitarget, multisensor tracking problems on the Illiac IV parallel processor
p0113 A78-18063
ILS (LANDING SYSTEMS)
U INSTRUMENT LANDING SYSTEMS
ILYUSHIN AIRCRAFT
NT IL-62 AIRCRAFT
20 years IL-18 --- aircraft design features, capabilities and applications
p0050 A78-13497
ILYUSHIN IL-62 AIRCRAFT
U IL-62 AIRCRAFT
IMAGE CORRELATORS
Advanced pattern matching for navigation and guidance
p0539 A78-49998
IMAGE ENHANCEMENT
Pattern recognition as an aid to radar navigation
p0530 A78-49855
IMAGE MOTION COMPENSATION
Evaluation of airborne radar Doppler processors
p0374 A78-37477
IMAGE PROCESSING
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
Pattern recognition as an aid to radar navigation
p0530 A78-49855
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles --- German thesis
p0592 A78-52498
IMAGERY
NT AERIAL PHOTOGRAPHY
NT COLOR PHOTOGRAPHY
NT HOLOGRAPHY
NT INFRARED IMAGERY
NT INFRARED PHOTOGRAPHY
NT RADAR IMAGERY
NT RADAR PHOTOGRAPHY
NT RADIOGRAPHY
NT SATELLITE-BORNE PHOTOGRAPHY
NT SCHLIEREN PHOTOGRAPHY
IMAGES
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
IMAGING TECHNIQUES
NT IMAGE ENHANCEMENT
NT RADAR IMAGERY
Automatic low frequency gain limiting for A-C coupled signal processing systems --- thermal imaging
p0054 A78-14938
A flight qualified graphics generator --- for B-1 defense system
p0539 A78-50007
Simultaneous sensor-presentation techniques study --- for attack aircraft
[AD-A043355] p0024 N78-10066
Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] p0246 N78-18083
IMBEDDINGS (MATHEMATICS)
Determination of optimal control using imbedding of the terminal conditions
p0357 N78-23029
IMMERSION
U SUBMERGING
IMMITTANCE
U ELECTRICAL IMPEDANCE
IMPACT
NT ECONOMIC IMPACT
NT HYPERVELOCITY IMPACT
IMPACT DAMAGE
Low energy impact behavior of composite panels
p0339 A78-35397
Mathematical analysis of impact erosion --- of supersonic flight vehicles
p0588 A78-51711

IMPACT DECELERATION
U DECELERATION
IMPACT PREDICTION
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
IMPACT RESISTANCE
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
Development of fiber shields for engine containment --- mathematical models
p0026 N78-10079
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104
IMPACT SENSITIVITY
U IMPACT RESISTANCE
IMPACT TESTS
Low energy impact behavior of composite panels
p0339 A78-35397
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
Full-scale aircraft crash tests of modified jet fuel
[AD-A043843] p0045 N78-11251
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
Impact tests on fibrous composite sandwich structures
[NASA-TM-78719] p0631 N78-33152
IMPACT TOLERANCES
Light airplane crash tests at impact velocities of 13 and 27 m/sec
[NASA-TP-1042] p0020 N78-10034
IMPEDANCE
NT ACOUSTIC IMPEDANCE
NT ELECTRICAL IMPEDANCE
IMPEDANCE MEASUREMENTS
EMP response of aircraft antennas
p0169 A78-21992
IMPELLER BLADES
U ROTOR BLADES (TURBOMACHINERY)
IMPELLERS
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
A comparison of the performances of centrifugal compressors with the same impeller and different radial inducers
[ONERA, TP NO. 1978-42] p0479 A78-45282
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
Investigation of flow in centrifugal impeller with tandem inducer
p0577 A78-50614
Investigation of the jet-wake flow of a highly loaded centrifugal compressor impeller
[NASA-TM-75232] p0198 N78-16051
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller
[DLR-FB 77-32] p0245 N78-18073
IMPINGEMENT
NT JET IMPINGEMENT
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112
IMPREGNATING
Studies on reinforced plastics --- boron fiber composites
[AAAF-NT-77-40] p0355 N78-22240
IMPULSE GENERATORS
Comparison of measured and calculated helicopter rotor impulsive noise --- wind tunnel test data and prediction analysis techniques
[NASA-TM-78473] p0311 N78-20917
IMPULSES
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
IMPURITIES
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235
IN-FLIGHT MONITORING
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
A new chip detector --- component failure detection in aircraft and helicopter propulsion and transmission systems
p0058 A78-15158
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
The measurement of performance and stability and control characteristics of a high subsonic jet aircraft in non-steady flight conditions employing high accuracy instrumentation techniques
p0074 A78-16596
In-flight measurement of aircraft acoustic signals
p0105 A78-17364
Flight measurement of aircraft onboard antennas
p0115 A78-18504
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
Fully-automated, pilot-monitored air traffic control
p0373 A78-37155
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
Sensor technology for turbine engine monitoring systems
[AIAA PAPER 78-1474] p0513 A78-47920
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
In-line monitoring of digital flight control computers
p0531 A78-49860
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
AIDS - Aircraft-integrated-data-system
p0600 A78-53675
Application of a flight-line disk crack detector to a small engine
p0027 N78-10088
Report on aircraft fatigue studies --- in-flight monitoring and stress measurements
[AD-A049876] p0317 N78-21102
Pilot evaluation of sailplane handling qualities
[NASA-CR-2960] p0360 N78-23081
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads --- 747 aircraft performance
[NASA-CR-135395] p0454 N78-27124
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109

INCIDENT RADIATION
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
INCOMPRESSIBLE BOUNDARY LAYER
Interaction of turbulent boundary layers in a right-angle corner
p0588 A78-51697
INCOMPRESSIBLE FLOW
Asymptotic theory of the swept wing
p0052 A78-14053
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
An analysis method for the viscous flow over circulation-controlled airfoils
[AIAA PAPER 78-157] p0160 A78-20710
Approximate wind-tunnel simulation of the dynamics of a system composed of a body with a trailing cable
p0165 A78-20902
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
An aerofoil with control surface in incompressible viscous flow
p0175 A78-23050
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
Potential flow around axisymmetric bodies - Direct and inverse problems
p0223 A78-26230
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
Unsteady incompressible flow past thin porous airfoils
p0427 A78-42918
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
The aerodynamic performance of a freely hinged door between two flows --- for supersonic transport propulsion nozzles
p0586 A78-51464
The theory of fabric porosity as applied to parachutes in incompressible flow
p0586 A78-51466
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996
A computational model for three-dimensional incompressible small cross flow wall jets
[AD-A048450] p0237 N78-18008
Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
Airfoil design by the method of singularities via parametric optimization of geometrically constrained least squares object function
[NLR-TR-76139-U] p0491 N78-28087
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
INCOMPRESSIBLE FLUIDS
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
INCONEL (TRADEMARK)
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112
INDIA
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474
INDICATING INSTRUMENTS
NT ANEMOMETERS
NT APPROACH INDICATORS
NT ATTITUDE INDICATORS
NT GYROCOMPASSES
NT HOT-FILM ANEMOMETERS
NT HOT-WIRE ANEMOMETERS
NT LASER ANEMOMETERS
NT MICROWAVE SENSORS
NT POSITION INDICATORS
NT RADIO DIRECTION FINDERS
NT SPEED INDICATORS
Application of light-emitting diodes /LEDs/ in aircraft analog indicators
p0176 A78-23059
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037
INDUCED FLUID FLOW
U FLUID FLOW
INDUCTION MOTORS
Linear machine power requirements and system comparisons --- for German magnetic levitation revenue vehicles
p0585 A78-51271
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
INDUCTION SYSTEMS
U INTAKE SYSTEMS
INDUCTORS
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
INDUSTRIAL AREAS
The airport city and the future intermodal transportation system --- Book
p0336 A78-34724
INDUSTRIAL MANAGEMENT
NT ENGINEERING MANAGEMENT
NT INVENTORY MANAGEMENT
NT PERSONNEL MANAGEMENT
INDUSTRIAL PLANTS
Noise research at DFVLR with relevance for industry
p0115 A78-18505
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
Technical evaluation report on the 51st(B) PEP Specialists' Meeting of the Propulsion and Energetics Panel on Seal Technology in Gas Turbine engines
[AGARD-AR-123] p0612 N78-32104
INDUSTRIES
NT AEROSPACE INDUSTRY
NT AIRCRAFT INDUSTRY
NT CONSTRUCTION INDUSTRY
INELASTIC BODIES
U RIGID STRUCTURES
INERTIA
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
INERTIA MOMENTS
U MOMENTS OF INERTIA
INERTIAL FORCES
U INERTIA

INERTIAL GUIDANCE
NT STRAPDOWN INERTIAL GUIDANCE
RNAV - Corporate operators set the pace
p0509 A78-47424
Glide path augmentation with inertial flight path angle
[AD-A046363] p0149 N78-15025
INERTIAL MEASURING UNITS
U INERTIAL PLATFORMS
INERTIAL NAVIGATION
The feasibility of an airborne thermal infrared position updating system
[AIAA 77-1477] p0005 A78-12234
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
EAR navigation update modes --- Electronically Agile Radar
p0066 A78-15667
Inertially aided scanning DME for area navigation
p0110 A78-17899
F-16 progress in performance flight testing using an inertial navigation unit
p0123 A78-19427
Airborne navigation systems
p0170 A78-22347
ALIDADE - The alignment on board aircraft carriers of the inertial navigation units of Super-Etendard aircraft
p0217 A78-25149
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed sensors --- German book
p0228 A78-27383
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906
Benefits of strapdown over gimbal INS systems for aircraft application
p0282 A78-30253
Alignment of inertial navigation units on the Super-Etendard aircraft carrier
p0342 A78-35895
SST flight planning and navigation - The first year's experience
p0372 A78-37154
Simulation testing via mini computer --- of inertial navigation systems
p0428 A78-43057
Advances in inertial navigation
p0509 A78-47481
Real-time simulators for augmented inertial navigation systems
p0537 A78-49967
Reliability of inertial navigation systems --- for military and commercial aircraft
p0537 A78-49968
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
Flight test results of the Strapdown hexad Inertial Peference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
New techniques for low cost strapdown inertial systems
p0315 N78-21073
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
Inertially-aided, all-weather landing systems for C/TOL
p0356 N78-2301
Laser-gyro strapdown inertial system applications
p0439 N78-26130
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
Technical evaluation report on the 24th Guidance and Control Panel technical meeting: Symposium on Applications of Advances in Navigation to Guidance and Control
[AGARD-AR-115] p0452 N78-27109
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
INERTIAL PLATFORMS
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
INERTIAL REFERENCE SYSTEMS
A new concept in integrated reference systems --- avionics cost reduction
[AIAA 77-1497] p0006 A78-12245
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
INFINITE SPAN WINGS
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857
Calculation of laminar boundary layers on infinite swept wings based on Thwaites two-dimensional method
[FFA-AU-1431] p0488 N78-28061
INFLATABLE DEVICES
U INFLATABLE STRUCTURES
INFLATABLE STRUCTURES
NT BALLOONS
NT HIGH ALTITUDE BALLOONS
NT METEOROLOGICAL BALLOONS
NT SKYHOOK BALLOONS
NT TETHERED BALLOONS
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
Linearized Newtonian aerodynamics of slender inflated cones
[AD-A048695] p0254 N78-19064
INFLUENCE COEFFICIENT
NT STRUCTURAL INFLUENCE COEFFICIENTS
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
INFORMATION DISSEMINATION
NT SELECTIVE DISSEMINATION OF INFORMATION
The ARTS III Umbrella - Concepts and applications --- for collecting and distributing aircraft positional data within ATC radar coverage areas
p0594 A78-52958
INFORMATION FLOW
An interface management approach to software development
p0535 A78-49933
The Central Flow Control /CFC/ system --- for Air Traffic Control System Command Center
p0595 A78-52960
The problem of technology transfer: Real or imagined
[AD-A042961] p0213 N78-17943
INFORMATION MANAGEMENT
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
INFORMATION RETRIEVAL
TESTPLT: Interactive computer procedure for wind-tunnel-data management, retrieval, comparison, and plotting
[NASA-TM-78663] p0309 N78-20144
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
INFORMATION SYSTEMS
NT MANAGEMENT INFORMATION SYSTEMS
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246

DAIS - Design and performance --- Digital Avionics Information System
[AIAA 77-1499] p0006 A78-12247
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
Compatibility testing and integration of DAIS multiplex bus equipments --- Digital Avionics Information System
p0064 A78-15638
Principles and simulation of JTIDS relative navigation --- Joint Tactical Information Distribution System
p0222 A78-26156
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
Palefac
[AD-A048331] p0244 N78-18065
Implementation plan for an air transportation research information service
[AD-A049301] p0256 N78-19081
An overview of aviation weather services
p0267 N78-19715

INFORMATION THEORY
Systematic analysis of safety in aviation. II
p0278 A78-29674

INFORMATION TRANSMISSION
U DATA TRANSMISSION

INFRARED ABSORPTION
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043

INFRARED DETECTORS
NT FLIR DETECTORS
Visually Activated Switching System --- using helmet-mounted IR transmitter for avionics control
p0067 A78-15669
Infrared receiver performance --- airborne warning system by detection of target spectral signature
p0538 A78-49985
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971

INFRARED FILTERS
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971

INFRARED IMAGERY
Automatic low frequency gain limiting for A-C coupled signal processing systems --- thermal imaging
p0054 A78-14938
Autothreshold autoscreener/FLIR system --- airborne target screener/Forward-Looking Infrared imaging system
p0538 A78-49984

INFRARED INSTRUMENTS
NT FLIR DETECTORS
NT INFRARED DETECTORS
NT INFRARED SPECTROMETERS

INFRARED PHOTOGRAPHY
Temperature profiles of rotating cooled blade --- via infrared photography of air-cooled turbine blades
p0573 A78-50581

INFRARED RADIOMETERS
The feasibility of an airborne thermal infrared position updating system
[AIAA 77-1477] p0005 A78-12234
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560

INFRARED REFLECTION
Thermal flux protection for aircraft
p0072 A78-16267

INFRARED SPECTRA
Infrared radiation from the exhaust jet of a J85-GE-5 turbojet
[AD-A043282] p0042 N78-11110

INFRARED SPECTROMETERS
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420

INFRASONIC FREQUENCIES
Long-distance focusing of Concorde sonic boom
p0517 A78-48052

INGESTION (ENGINES)
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649

INHIBITORS
NT WEAR INHIBITORS

INHOMOGENEITY
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909

INITIAL VALUE PROBLEMS
U BOUNDARY VALUE PROBLEMS

INJECTION
NT FLUID INJECTION
NT FUEL INJECTION
NT GAS INJECTION

INJECTION CARBURETORS
U CARBURETORS
U FUEL INJECTION

INJECTORS
NT VORTEX INJECTORS
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Unsteady fluid flow in a swirl injector
p0581 A78-50781
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084

INLET FLOW
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Calculation of the mean flow characteristics at the inlet to the air intake located under a delta wing
p0165 A78-20895
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
Inlet flow distortions in axial flow compressors
p0419 A78-41508
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet --- Supersonic Cruise Aircraft Research
[AIAA PAPER 78-961] p0474 A78-45096
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609
Surge responsibility and range characteristics of centrifugal compressors

p0577 A78-50616
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
Mechanical characteristics of stability-bleed valves for a supersonic inlet --- for the YF-12 aircraft
[NASA-TM-X-3483] p0098 N78-13063
Effect of design changes on aerodynamic and acoustic performance of translating-centerbody sonic inlets
[NASA-TP-1132] p0236 N78-17998
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
A comparison of experimental results and three-dimensional theoretical predictions for a compressor rotor with inlet-distortion, with special reference to Stalling
[CUED/A-TURBO/TR-91] p0362 N78-23092
Acoustic evaluation of a novel swept-rotor fan --- noise reduction in turbofan engines
[NASA-TM-78878] p0403 N78-24897
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control --- Lewis 10 by 10 ft supersonic wind tunnel tests
p0605 N78-32062

INLET NOZZLES
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071

INLET PRESSURE
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525

INLETS (DEVICES)
U INTAKE SYSTEMS

INORGANIC COATINGS
NT ANODIC COATINGS
NT CERAMIC COATINGS

INORGANIC SULFIDES
NT WURTZITE

INPUT/OUTPUT ROUTINES
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
A three-dimensional potential-flow program with a geometry package for input data generation
[NASA-CR-145311] p0312 N78-21047
Plotit-method of interactively plotting input data for the vorlax computer program --- computerized aircraft configuration design
[NASA-CR-158896] p0495 N78-28830
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044

INSECTICIDES
NT URETHANES

INSECTS
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
Flight investigation of insect contamination and its alleviation
p0448 N78-27067

INSENSITIVITY
U SENSITIVITY

INSERTS
NT NOZZLE INSERTS

INSPECTION
NT X RAY INSPECTION
Arrival inspections/pre-operational inspections (aviation materiel)
[AD-A047260] p0202 N78-16376
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109

INSTABILITY
U STABILITY

INSTRUCTIONS
U EDUCATION

INSTRUMENT APPROACH
A method of calculating ILS approach surfaces
p0275 A78-29207
The missed approach --- psychological factors in aircraft instrument landing decisions
p0587 A78-51517
Equipment permitting fuel savings during approach
[NAAF-NT-77-27] p0397 N78-24130

INSTRUMENT COMPENSATION
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
Vibration control of optical packages in aircraft
p0063 A78-15594
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
A compensation technique for acceleration-induced frequency changes in crystal oscillators
p0530 A78-49859

INSTRUMENT ERRORS
Base motion sensitivity analysis for airborne ILIC pointing and tracking systems --- In-Loop Integration Control
p0063 A78-15593
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672
Douglas Aircraft Company laser tracker
p0124 A78-19436
Multiple laser tracker operations
p0124 A78-19438
Subisokinetic sampling errors for aircraft turbine engine smoke probes
p0379 A78-38575
Investigation of the accuracy of one-way range measurements --- for radio navigation systems
p0476 A78-45158
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
The use of pyranometers onboard aircraft
[DLR-FB-77-24] p0145 N78-14379
The use of pyranometers in aircraft
[ESA-TT-433] p0250 N78-18408

INSTRUMENT FLIGHT RULES
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
The missed approach --- psychological factors in aircraft instrument landing decisions
p0587 A78-51517
Preliminary Candidate Advanced Avionics System (PCAAS) --- reduction in single pilot workload during instrument flight rules flight
[NASA-CR-152026] p0024 N78-10061
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075

INSTRUMENT LANDING SYSTEMS
NT ALL-WEATHER LANDING SYSTEMS
NT AUTOMATIC LANDING CONTROL
The technical potential of instrument landing systems in the present and in the future
[DGLR PAPER 77-019] p0189 A78-24412
A method of calculating ILS approach surfaces
p0275 A78-29207
Doppler MLS - The UK solution
p0280 A78-29934
Get acquainted with scanning-beam MLS --- reviewing capabilities and parameters
p0416 A78-40844
VASI-S - A visual landing aid
p0468 A78-43800
Probabilistic model of an instrument landing system
p0509 A78-47407

Instrument landing system improvement program: Far-field monitoring
[AD-A042320/2] p0024 N78-10063
FAA lightning protection study: Lightning protection requirements for Wilcox Mark I/D instrument landing system
[AD-A043907] p0036 N78-11044
AWLS operational flight test
[AD-A043814] p0037 N78-11050
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
Experimental testing of flight control head up displays
[NASA-TM-75205] p0208 N78-17053
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
Recent flight test results using an electronic display format on the NASA B-737
p0432 N78-26063
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
TRSB microwave landing system demonstration program at Brussels, Belgium
[AD-A054298] p0546 N78-30075
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073

INSTRUMENT PACKAGES
Data relay packages for commercial ships and aircraft
[AIAA 77-1560] p0051 A78-13685
Vibration control of optical packages in aircraft
p0063 A78-15594

INSTRUMENT RECEIVERS
GDM/GPS receiver hardware implementation
p0062 A78-15589
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591

INSTRUMENTAL ANALYSIS
U AUTOMATION

INSULATION
NT ELECTRICAL INSULATION
NT THERMAL INSULATION

INTAKE SYSTEMS
NT AIR INTAKES
NT ENGINE INLETS
NT SUPERSONIC INLETS
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
Phugoid characteristics of a YF-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/AE-NOTE-357] p0313 N78-21054
Pilot model air cushion vehicle (LACV-30) program
[AD-A053686] p0492 N78-28275
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
Performance with and without inlet radial distortion of a transonic fan stage designed for reduced loading in the tip region
[NASA-TP-1294] p0545 N78-30057
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft
[NASA-TM-78530] p0603 N78-32044
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108

INTEG PROGRAM FOR AEROSPACE VEH DESIGN
U IPAD

INTEGRAL EQUATIONS
NT SINGULAR INTEGRAL EQUATIONS
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
Transonic integral equation formulation for lifting profiles and wings
p0113 A78-18238
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
Uniqueness theorem for an integral equation of a rectangular thin-section wing
p0130 A78-20201
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
Variational principles for the transonic airfoil problem
p0285 A78-30891
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
Integral equation formulation for transonic flow past lifting wings
p0571 A78-50459
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
Calculation of the compressible boundary layer around a profile
[AAAP-NT-77-08] p0034 N78-11019
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
p0248 N78-18291
Prospects for computational aerodynamics --- integro-differential formulation
p0270 N78-19795
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
[ESA-TT-436] p0365 N78-23311

A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081
INTEGRAL TRANSFORMATIONS
NT FAST FOURIER TRANSFORMATIONS
Application of the integral-transformation method to three-dimensional unsteady problems of the theory of cascades
p0370 A78-36366
INTEGRATED CIRCUITS
NT LARGE SCALE INTEGRATION
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
INTEGRATION (REAL VARIABLES)
U MEASURE AND INTEGRATION
INTEGRATORS
NT DIGITAL INTEGRATORS
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
Propulsion/flight control integration technology (PROFIT) design analysis status
[NASA-CR-144875] p0501 N78-29101
INTEGRODIFFERENTIAL EQUATIONS
U DIFFERENTIAL EQUATIONS
U INTEGRAL EQUATIONS
INTELLIGIBILITY
NT SPEECH RECOGNITION
INTERCEPTOR AIRCRAFT
U FIGHTER AIRCRAFT
INTERCEPTORS
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
INTERFACES
NT FLUID BOUNDARIES
NT GAS-SOLID INTERFACES
NT SOLID-SOLID INTERFACES
INTERFERENCE
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
INTERFERENCE DRAG
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
Minimum trimmed drag and optimum c.g. position --- center of gravity
p0473 A78-44831
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
INTERFERENCE LIFT
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
Comment on 'Effect of stabilizer dihedral and static lift on T-tail flutter'
p0416 A78-40800
INTERFEROMETERS
NT MICHELSON INTERFEROMETERS
NT MICROWAVE INTERFEROMETERS
Study of gas flows with shearing interferometers
p0327 A78-32622
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
INTERFEROMETRY
NT HOLOGRAPHIC INTERFEROMETRY
INTERMETALLICS
The promise of eutectics for aircraft turbines
p0215 A78-24882
INTERNAL COMBUSTION ENGINES
NT DIESEL ENGINES
NT DUCTED FAN ENGINES
NT GAS TURBINE ENGINES
NT HELICOPTER ENGINES
NT HYDROGEN ENGINES
NT J-85 ENGINE
NT JET ENGINES
NT RAMJET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
NT T-38 ENGINE
NT T-55 ENGINE
NT T-58 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT TURBOFAN ENGINES
NT TURBOJET ENGINES
NT TURBOPROP ENGINES
NT WANKEL ENGINES
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
Optimization of the cooling system of an air-cooled internal combustion engine
p0419 A78-41510
General aviation internal combustion engine research programs at NASA-Lewis Research Center
[AIAA PAPER 78-932] p0462 A78-43505
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
INTERNAL PRESSURE
Natural frequencies of a soft heavy cylindrical shell under the effect of internal pressure
p0580 A78-50717
INTERNAL STRESS
U RESIDUAL STRESS
INTERNATIONAL COOPERATION
Acoustical standards and their application to aircraft noise
p0341 A78-35661
A rising sun in aircraft --- Japanese commercial aircraft development programs
p0379 A78-38524
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
Airliner numbers game - Does it add up --- political and technological aspects of international aircraft industries
p0525 A78-49524
The changing environment of international air commerce
p0592 A78-52448
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
INTERNATIONAL LAW
The future determines the past - Bermuda I in the light of Bermuda II --- air transportation agreement
p0223 A78-26470
Bermuda II and after
p0223 A78-26471
The impact of Bermuda II on future bilateral agreements
p0224 A78-26472
The Concorde v. the United States - Some conclusions
p0224 A78-26474
Critical considerations on the legal development of personal liability with attention to air transportation
p0281 A78-29944
Flying over the exclusive economic zone --- aircraft overflight regulations
p0281 A78-29945
International jurisdiction related to the Warsaw Convention during the years from 1974 to 1976. II
p0589 A78-51822
INTERNATIONAL RELATIONS
NT INTERNATIONAL COOPERATION
INTERNATIONAL SYSTEM OF UNITS
Problems in world-wide standardization of the units of height measurement
[AD-A051150] p0402 N78-24385
Problems in world-wide standardization of the units of altitude measurement
[PB-277982/5] p0454 N78-27119
INTERPLANETARY PROPULSION
U ROCKET ENGINES
INTERPOLATION
The closed spline functions --- applied to interpolation problems for airfoils
p0415 A78-40493
INTERROGATION
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028

Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators --- wind shear
[AD-A049277] p0257 N78-19089
Design of a collision avoidance system model with statistical interrogation --- separation and collision avoidance by nonsynchronous techniques (SECANT)
p0304 N78-20107
INTRUDER AIRCRAFT
U A-6 AIRCRAFT
INVENTIONS
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
INVENTORY MANAGEMENT
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
INVERTEBRATES
NT INSECTS
INVESTIGATION
NT AIRCRAFT ACCIDENT INVESTIGATION
INVISCID FLOW
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288
Three-dimensional transonic shear flow in a channel
p0010 A78-12290
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades
p0012 A78-12311
Flow over a wing with an attached free vortex
p0059 A78-15337
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Inviscid supersonic flow about a thin rectangular plate
p0165 A78-20906
Calculation of the Laval-nozzle flow by a modified Lax-Wendroff method of second-order accuracy
p0166 A78-20970
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
The closed spline functions --- applied to interpolation problems for airfoils
p0415 A78-40493
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
Inviscid flow through wide-angle diffuser with actuator disk --- for wind turbine augmentation
p0597 A78-53095
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
Inviscid modeling of aircraft trailing vortices
p0080 N78-12018
Subsonic, inviscid flow by the finite element method
[WRE-TR-1858(W)] p0147 N78-15005
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
Dynamic stall: An example of strong interaction between viscous and inviscid flows
[NASA-TM-75447] p0615 N78-32384
INVISIBILITY
U VISIBILITY
ION PROBES
Methods and results of boundary layer measurements on a glider
[NASA-TM-75294] p0394 N78-24085
IONIZING RADIATION
NT COSMIC RAYS
NT ULTRAVIOLET RADIATION
IONOSPHERIC ABSORPTION
U IONOSPHERIC PROPAGATION
IONOSPHERIC COMPOSITION
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
IONOSPHERIC PROPAGATION
A simplification in position determination with the Omega system
p0070 A78-15921
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
Ionospheric effects on satellite navigation and air traffic control systems
p0365 N78-23325
IONOSPHERIC REFLECTION
U IONOSPHERIC PROPAGATION
IOWA
Formulation of Iowa State airport system
p0229 A78-27548
IP (IMPACT PREDICTION)
U COMPUTERIZED SIMULATION
IPAD
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
IRAN
Modernization program for the Iranian National Airspace System
p0596 A78-52971
TRSB microwave landing system demonstration program at Shiraz, Iran
[AD-A055526] p0625 N78-33071
IRON ALLOYS
NT HIGH STRENGTH STEELS
NT MARAGING STEELS
NT STAINLESS STEELS
NT STEELS
IRON COMPOUNDS
NT FERROCENES
IROQUOIS HELICOPTER
U UH-1 HELICOPTER
IRRITATION
NT TOXICITY AND SAFETY HAZARD
IRROTATIONAL FLOW
U POTENTIAL FLOW
ISING MODEL
U MATHEMATICAL MODELS
ISOLATORS
NT VIBRATION ISOLATORS
ISOPERIMETRIC PROBLEM
Isoperimetric problems of the theory of supercavitated mechanisms
p0477 A78-45172
ISOSTATIC PRESSURE
Manufacture of titanium components by hot isostatic pressing
p0013 A78-12456
Development of hot isostatically pressed Rene 95 turbine parts

[AD-A043688] p0029 N78-10109
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
ISOTHERMAL PROCESSES
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
ISOTOPES
NT RADIOACTIVE ISOTOPES
NT ZIRCONIUM 95
ISOTROPIC TURBULENCE
Some aspects of aircraft wake behavior near the ground
p0055 A78-14960
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
ITERATION
NT ITERATIVE SOLUTION
ITERATIVE SOLUTION
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils
[AIAA PAPER 78-11] p0171 A78-22553
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
Successive-approximation calculation of a steady subsonic gas flow about an airfoil lattice
p0186 A78-24085
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
IZSAK ELLIPSOID
U ELLIPSOIDS

J

J-85 ENGINE
Infrared radiation from the exhaust jet of a J85-GE-5 turbojet
[AD-A043282] p0042 N78-11110
Blade row dynamic digital compression program. Volume 2: J85 circumferential distortion redistribution model, effect of Stator characteristics, and stage characteristics sensitivity study
[NASA-CR-134953] p0627 N78-33103
JACKS (ELECTRICAL)
U ELECTRIC CONNECTORS
JAGUAR AIRCRAFT
Jaguar and Tornado avionic development testing
p0380 A78-38748
JAMMERS
The next generation EW system - ASPJ --- Airborne Self Protection Jammer
p0288 A78-31700
ASPJ - Partners at last --- Airborne Self Protection Jammers
p0336 A78-34676
Comparisons of high anti-jam design techniques for GPS receivers --- Global Positioning System
p0530 A78-49857
Digital system architecture for a 1980's jammer --- for military aircraft and ships
p0537 A78-49973
JAMMING
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
Airborne electronic warfare in the modern military force
[AIAA PAPER 78-324] p0185 A78-24018
Radar electronic counter-countermeasures
p0222 A78-26159
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078
JC-130 AIRCRAFT
U C-130 AIRCRAFT
JEEPS
U AUTOMOBILES
JET AIRCRAFT
NT A-4 AIRCRAFT
NT A-6 AIRCRAFT
NT A-7 AIRCRAFT
NT A-300 AIRCRAFT
NT ALPHA JET AIRCRAFT
NT AN-24 AIRCRAFT
NT B-52 AIRCRAFT
NT B-57 AIRCRAFT
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT BOEING 747 AIRCRAFT
NT C-5 AIRCRAFT
NT C-9 AIRCRAFT
NT C-135 AIRCRAFT
NT C-140 AIRCRAFT
NT C-141 AIRCRAFT
NT CANBERRA AIRCRAFT
NT CONCORDE AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
NT EUROPEAN AIRBUS
NT F-4 AIRCRAFT
NT F-5 AIRCRAFT
NT F-8 AIRCRAFT
NT F-14 AIRCRAFT
NT F-15 AIRCRAFT
NT F-16 AIRCRAFT
NT F-17 AIRCRAFT
NT F-18 AIRCRAFT
NT F-27 AIRCRAFT
NT F-28 TRANSPORT AIRCRAFT
NT F-100 AIRCRAFT
NT F-101 AIRCRAFT
NT F-102 AIRCRAFT
NT F-106 AIRCRAFT
NT F-111 AIRCRAFT
NT HFB-320 AIRCRAFT
NT HP-115 AIRCRAFT
NT IL-62 AIRCRAFT
NT L-1011 AIRCRAFT
NT LEAR JET AIRCRAFT
NT P-3 AIRCRAFT
NT P-1127 AIRCRAFT
NT SAAB 37 AIRCRAFT
NT T-37 AIRCRAFT
NT TURBOFAN AIRCRAFT
NT TURBOPROP AIRCRAFT
NT U-2 AIRCRAFT
NT YAK 40 AIRCRAFT
Airline viewpoint on systems development and integration --- avionics information processing
[AIAA 77-1496] p0006 A78-12244
Integration, installation, and flight test of a fail passive digital automatic flight control system in a jet transport aircraft
[AIAA 77-1514] p0008 A78-12259
The geriatric jet problem
p0014 A78-12600
The next commercial jet transport: The need, economics, technology, and financing; Air Transportation Research International Forum, San Francisco, Calif., May 9, 1977, Papers
p0057 A78-15084
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085

An optimistic view of the plane facts --- cost-efficient airliners development
p0057 A78-15086
The next generation of commercial aircraft - International perspective
p0057 A78-15087
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
Commercial air transport - The next ten years
p0058 A78-15091
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
The measurement of performance and stability and control characteristics of a high subsonic jet aircraft in non-steady flight conditions employing high accuracy instrumentation techniques
p0074 A78-16596
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
An analysis of the aircraft trailing vortex system
[AIAA PAPER 78-312] p0185 A78-24013
The development of materials for turbojets
p0221 A78-26041
New trends and problem areas in automatic flight control
p0282 A78-30252
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-31307
Aircraft propulsion from the back room /Sixty-sixth Wilbur and Orville Wright Memorial Lecture/
p0369 A78-36279
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports
p0428 A78-43053
Minimum-time loop maneuvers of jet aircraft
p0473 A78-44830
An experiment on the gust response of a transport airplane by free-flight model
p0474 A78-44835
Structural material trends in commercial aircraft
[AIAA PAPER 78-1552] p0482 A78-46515
From Challenger to winner --- Canadair executive jet design and development
p0510 A78-47570
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055
Jet aircraft hydrocarbon fuels technology
[NASA-CP-2033] p0266 N78-19325
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8474] p0299 N78-20065
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Factors affecting the retirement of commercial transport jet aircraft
[NASA-CR-152115] p0316 N78-21092
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099
Project plan for joint FAA/NASA head-up display concept evaluation
[NASA-TM-78512] p0495 N78-28979
Assessment of atmospheric condensation nuclei associated with jet aircraft traffic
[AD-A054319] p0504 N78-29705
Analysis of the engine fragment threat and the crush environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078

JET AIRCRAFT NOISE
The quiet battle over aircraft noise
p0058 A78-15167
Generation and suppression of fan-compressor noise
p0075 A78-16599
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft
[AIAA PAPER 78-242] p0162 A78-20765
Two point correlations of jet noise
p0176 A78-23219
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
The noise from the large-scale structure of a jet
p0227 A78-27144
Optimum structural design of sheet-stringer panels subjected to jet noise excitation
p0230 A78-27887
The energy costs of some noise abatement procedures
p0288 A78-31313
Prospects for supersonic jet noise suppression
p0329 A78-33089
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
State-of-the-art of turbofan engine noise control
p0340 A78-35658
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
The reduction of the annoyance caused by subsonic jet aircraft noise
p0343 A78-35975
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
Pressure dependence of turbulent jet noise
p0470 A78-44357
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
British Airways v. Port Authority - Its impact on aircraft noise regulation

p0582 A78-51128
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
High velocity jet noise source location and reduction. Task 1 supplement: Certification of the General Electric jet noise anechoic test facility
[AD-A042327/7] p0031 N78-10119
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
An empirical model for inverted-velocity-profile jet noise prediction
[NASA-TM-73838] p0098 N78-13061
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft
[NASA-TM-73816] p0102 N78-13854
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053
Exploratory investigation of decelerating approaches of a twin-engined jet transport. Volume 2: Moving-base simulation and comparison with related experiments
[NLR-TR-76150-U] p0155 N78-15859
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Acoustic interference effects and the role of Helmholtz number in aerodynamic noise
[DLR-IB-257-77/11] p0251 N78-18878
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Generation and suppression of fan-compressor noise
[FOK-3-1823] p0353 N78-22107
On an acoustic field generated by subsonic jet at low Reynolds numbers
[NASA-CR-156182] p0356 N78-22858
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
USB flow characteristics related to noise generation
p0391 N78-24060
Characteristics of USB noise
p0391 N78-24061
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
On the use of relative velocity exponents for jet engine exhaust noise
[NASA-TM-78873] p0398 N78-24137
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2 --- jet aircraft noise
[NASA-CR-145262] p0404 N78-24900
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
Propulsion systems noise technology
p0447 N78-27056
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
USAF bioenvironmental noise data handbook. Volume 83: KC-135A aircraft, near and far-field noise
[AD-A054138] p0495 N78-28893
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909
Reference aircraft for ICAO Working Group E
[NASA-CR-158929] p0609 N78-32087
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876

JET AUGMENTED WING FLAPS
U JET FLAPS
U WING FLAPS

JET BLAST EFFECTS
The investigation of take-off and landing characteristics of jet shortened take-off and landing aircraft (STOL)
[AD-A044292] p0023 N78-10055

JET CONTROL
Pressure dependence of turbulent jet noise
p0470 A78-44357

JET DAMPING
U DAMPING
U SPIN REDUCTION

JET DRIVE
U JET PROPULSION

JET ENGINE FUELS
NT JP-4 JET FUEL
NT JP-5 JET FUEL
Increasing the resources of jet fuels
p0003 A78-11699
Alternative hydrocarbon fuels for aviation
p0060 A78-15400
Technical-analytical assistance now even in the field --- transportable lab for analysis of jet fuels and liquid oxygen supplies
p0119 A78-19053
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906

Antimisting fuel kinematics related to aircraft crash landings
p0230 A78-28147
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197
Properties of fuels used in the Czechoslovak aircraft industry
p0277 A78-29588
Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor
p0330 A78-33114
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Jet fuels from synthetic crudes
p0461 A78-43415
Gas turbine engine fuel from synthetic crude
p0461 A78-43416
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
Let's put fuel efficiency into perspective
p0508 A78-47269
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
[NASA-TM-73829] p0101 N78-13233
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235
Comparison tests on the 100-GPM electrokinetic fuel decontaminator and a 100-GPM military standard filter/separator
[AD-A048655] p0248 N78-18226
Effect of fuel bound nitrogen on oxides of nitrogen emission from a gas turbine engine
[AD-A048382] p0264 N78-19162
Jet aircraft hydrocarbon fuels technology
[NASA-CP-2033] p0266 N78-19325
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
Alternate fuels nitrogen chemistry
[AD-A053299] p0411 N78-25240
Aviation fuels beyond the 1980's --- liquefied gases and synthetic fuels
[NASA-TM-79510] p0442 N78-26223
Impact of broad-specification fuels on future jet aircraft --- engine components and performance
p0448 N78-27059
The military utility of very large airplanes and alternative fuels
[AD-A053604] p0487 N78-28051
Hydrogen content of hydrocarbon fuels by a low-resolution nuclear resonance method
[AD-A054465] p0503 N78-29262

JET ENGINES
NT DUCTED FAN ENGINES
NT J-85 ENGINE
NT RAMJET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
NT T-38 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT TURBOFAN ENGINES
NT TURBOJET ENGINES
NT TURBOPROP ENGINES
The next engine decision - Why it takes so long --- for passenger airliners
p0058 A78-15090
Aircraft and helicopter engines - Fundamentals of design and flight operations --- Russian book
p0059 A78-15222
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
Sound separation probes for flowing duct noise measurements --- jet engine diagnostics
p0106 A78-17396
Instrumentation and control for a large engine test facility
p0107 A78-17584
Construction of a mathematical model of a jet engine for analyzing transient flows
p0167 A78-20971
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
Holographic inspection of jet engine composite fan blades
[SAE PAPER 770975] p0179 A78-23819
Theory of two frequency ranges of unstable oscillations of turbulent combustion in a jet-engine chamber. I - Formulation of the stability problem, the characteristic equation
p0187 A78-24253
Economic and safety aspects of prolonging engine life
p0217 A78-25142
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
Main characteristics of the ADT 4000-4100 digital computer for a hybrid computing system --- for jet engine simulation
p0277 A78-29589
Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
Data acquisition in the case of a jet-engine test stand
p0335 A78-34488
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397
Expendable design concept --- applied to gas generator for jet fuel starter
[AIAA PAPER 78-964] p0463 A78-43523
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
Design philosophy for engine forgings
p0509 A78-47452
Detecting abnormal turbine engine deterioration using electrostatic methods
[AIAA PAPER 78-1473] p0513 A78-47919
Sensor technology for turbine engine monitoring systems
[AIAA PAPER 78-1474] p0513 A78-47920
Aircraft afterburner catalytic flame stabilization
p0572 A78-50570
Research and development of digital jet-engine controls
p0578 A78-50626
Theory on the two-frequency ranges for the unsteady fluctuations of the turbulent combustion process in a jet-engine combustion chamber. II - Analysis of the characteristic equation, comparison with the experiment
p0580 A78-50778
Design of rotors for improved structural life
p0027 N78-10085
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070

Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107
An identification and characterization of cost models/techniques used by Air Force Logistics Command to estimate jet engine operation and support costs
[AD-A044083] p0088 N78-12095
Evaluation of an automated smoke abatement system for jet engine test cells
[AD-A044587] p0089 N78-12107
Some problems of exploitation of jet turbine aircraft engines of Lot Polish Air Lines
[AD-A046221] p0151 N78-15048
Development of cost estimating relationships for aircraft jet core-engine overhaul costs
[AD-A047667] p0209 N78-17067
Composite hub/metal blade compressor rotor
[NASA-CR-135343] p0247 N78-18131
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
Stator rotor tools
[NASA-CASE-MSC-16000-1] p0402 N78-24544
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy --- jet engine compressor blades
p0444 N78-26468
CF6 jet engine performance deterioration results
p0446 N78-27049
JT9D jet engine performance deterioration
p0446 N78-27050
CF6 performance improvement
p0447 N78-27051
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads --- 747 aircraft performance
[NASA-CR-135395] p0454 N78-27124
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
Alternatives for jet engine control
[NASA-CR-157578] p0563 N78-31107
Status of the Air Force's F-16 aircraft program
[PB-280304/7] p0567 N78-31946
Non-extractive electro-optical measurement of jet-engine emissions
[AD-A056783] p0628 N78-33105

JET EXHAUST
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833
Detecting abnormal turbine engine deterioration using electrostatic methods
p0590 A78-51946
Effect of a simulated engine jet blowing above an arrow wing at Mach 2.0
[NASA-TP-1050] p0020 N78-10030
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066
Sources of variability and inaccuracies in aircraft gas turbine emission measurements
[PB-270898/0] p0099 N78-13069
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data
p0322 N78-21148
On the use of relative velocity exponents for jet engine exhaust noise
[NASA-TM-78873] p0398 N78-24137
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392

JET FLAMES
U JET FLOW
JET FLAPS
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
Wind-tunnel investigation of the aerodynamic performance, steady and vibratory loads, surface temperatures and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-X-72794] p0140 N78-14031
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-D-8235] p0194 N78-15999
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
The feasibility of the jet-flap rotor as a lift generator for vertical takeoff and landing aircraft
[AD-A050214] p0307 N78-20125
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052

JET FLIGHT
U JET AIRCRAFT
JET FLOW
NT AIR JETS
NT SUPERSONIC JET FLOW
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
Characteristics of the jet acceleration of a flow to hypersonic speeds
p0166 A78-20953
Numerical simulation of the interaction of jet and freestream flows in engine exhaust systems
[AIAA PAPER 78-144] p0173 A78-22584
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
Azimuthal decomposition of the power spectral density of jet noise
p0375 A78-37532
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
Small perturbation theory for supersonic jets
[AIAA PAPER 78-1151] p0421 A78-41851
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
Mach number and temperature effects on jets
[AIAA PAPER 78-1152] p0476 A78-45134
Film cooling of a gas turbine blade
p0573 A78-50580
Distortion of a flat jet in a bounded cross-stream in the presence of a wake space
p0580 A78-50779
An empirical model for inverted-velocity-profile jet noise prediction
[NASA-TM-73838] p0098 N78-13061

Investigation of the jet-wake flow of a highly loaded centrifugal compressor impeller
[NASA-TM-75232] p0198 N78-16051
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
Evaluation of a method for the predicton of jet-airframe interference
[NLR-TR-76132-U] p0438 N78-26111
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149

JET FUELS
U JET ENGINE FUELS

JET IMPINGEMENT
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
The influence of V/STOL vehicle configuration variables on vectored jet induced flow fields in ground effect
[AIAA PAPER 78-1021] p0465 A78-43555
Impingement cooling and its application to combustor design
p0573 A78-50584
Investigation of VTOL upwash flows formed by two impinging jets
[AD-A047805] p0205 N78-17025
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
Externally blown flap impingement parameters
p0390 N78-24053
Investigations of scaling laws for jet impingement
p0393 N78-24074

JET LIFT
How good is jet lift VTOL technology
p0076 A78-16696
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
Minimum induced drag configurations with jet interaction
[NASA-CR-145344] p0204 N78-17002
VTOL performance estimation for jet lift aircraft
p0435 N78-26082

JET MIXING FLOW
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling performance
p0573 A78-50582
Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow
p0582 A78-50797
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883

JET NOISE
U JET AIRCRAFT NOISE

JET NOZZLES
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496

JET PILOTS
U AIRCRAFT PILOTS

JET PROPULSION
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
Project SQUID
[AD-A047076] p0199 N78-16056

JET STAR AIRCRAFT
U C-140 AIRCRAFT

JET THRUST
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime
p0187 A78-24275
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397

JET VANES
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371

JETAVATORS
U GUIDE VANES

JF 101 AIRCRAFT
U F-101 AIRCRAFT

JITTER
U VIBRATION

JOINTS (JUNCTIONS)
NT LAP JOINTS
NT METAL JOINTS
NT WELDED JOINTS
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints
p0077 A78-16907
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
Nondestructive testing of adhesive bonded structure
p0480 A78-45937
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483

JOUKOWSKI TRANSFORMATION
Description of a five-parameter profile family --- Geckeler-Mueller conformal mapping method for airfoil profiles
[VTH-LR-220] p0138 N78-14011

JOURNAL BEARINGS
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
Squeeze film damper characteristics for gas turbine engines
[ASME PAPER 77-DET-23] p0226 A78-26796

JOURNALS (SHAFTS)
U SHAFTS (MACHINE ELEMENTS)

JP-4 JET FUEL
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Infrared radiation from the exhaust jet of a J85-GE-5 turbojet
[AD-A043282] p0042 N78-11110
Development of a catalytic combustor fuel/air carburetion system
[AD-A044063] p0088 N78-12093
Electrostatic charging of JP-4 fuel on polyurethane foams
[AD-A053831] p0457 N78-27278
JP-5 JET FUEL
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259

K

K BAND
U EXTREMELY HIGH FREQUENCIES
KA BAND
U EXTREMELY HIGH FREQUENCIES
KALMAN FILTERS
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
EAR navigation update modes --- Electronically Agile Radar
p0066 A78-15667
A performance analysis of a radar tracking filter --- digital Kalman filter for aircraft targets
p0107 A78-17564
Failure detection and correction for turbofan engines
p0184 A78-23918
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
Assessment of dynamic coordinate alignment for elastic aircraft --- flight control Kalman filter estimates
p0538 A78-49987
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
Suboptimal adaptive filtering of radio signals
p0601 A78-53903
Flight-path reconstruction of symmetric nonsteady flights
[NLR-TR-76133-U] p0243 N78-18056
Improvement of flight measuring data with a Kalman filter
[BMVG-FBWT-77-6] p0243 N78-18057
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105
An extended Kalman filter fire control system against air-to-air missiles, volume 2
[AD-A055637] p0610 N78-32091
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055
KC-130 AIRCRAFT
U C-130 AIRCRAFT
KC-135 AIRCRAFT
U C-135 AIRCRAFT
KENYA
TRSB microwave landing system demonstration program at Nairobi, Kenya
[AD-A054646] p0489 N78-28074
KERNEL FUNCTIONS
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
KEROSENE
Aviation fuels - A supplier's perspective
p0287 A78-31308
Ignition of liquid fuel sprays at subatmospheric pressures
p0470 A78-44268
KESTREL AIRCRAFT
U P-1127 AIRCRAFT
KEVLAR (TRADEMARK)
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
Impact tests on fibrous composite sandwich structures
[NASA-TM-78719] p0631 N78-33152
KEYING
NT PHASE SHIFT KEYING
KINEMATIC EQUATIONS
Calculation of horizontal tail loads in maneuvering flight
[DLR-IB-536-76/4] p0137 N78-14003
KINEMATICS
Landing gear kinematics
p0468 A78-43762
KINESTHESIS
U PROPRIOCEPTION
KINETIC EQUATIONS
NT HYDRODYNAMIC EQUATIONS
NT KINEMATIC EQUATIONS
KINETIC FRICTION
NT SLIDING FRICTION
KINETIC HEATING
NT AERODYNAMIC HEATING
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3798] p0143 N78-14158
KINETICS
NT ELECTROKINETICS
NT NEWTON THEORY
NT REACTION KINETICS
KIRCHHOFF-HELMHOLTZ FLOW
U PIPE FLOW
KIRCHHOFF-HUYGENS PRINCIPLE
U WAVE PROPAGATION
KITE BALLOONS
U TETHERED BALLOONS
KNIGHT SHIFT
U NUCLEAR MAGNETIC RESONANCE
KU BAND
U SUPERHIGH FREQUENCIES

L

L BAND
U ULTRAHIGH FREQUENCIES
L-1011 AIRCRAFT
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
British Airways Tri-Star - Present and future
p0386 A78-39393
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
The L-1011-500 long-range TriStar
p0591 A78-52245
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
Substructure coupling: A different approach
p0091 N78-12455
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
Correlation of wind-tunnel and flight-test data for the Lockheed L-1011 Tristar airplane
p0436 N78-26094
Development and flight evaluation of active controls in the L-1011 --- including wing load alleviation and stability augmentation
p0496 N78-29051
LABORATORIES
NT ENGINE TESTING LABORATORIES
LABORATORY EQUIPMENT
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188

LAG (DELAY)
U TIME LAG
LAKE ERIE
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
LAKES
NT LAKE ERIE
LAMINAR BOUNDARY LAYER
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Recent developments in numerical solutions for equations of the boundary layer in laminar and turbulent flow
p0118 A78-19030
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635
Some special boundary layer problems /20th Ludwig Prandtl Memorial Lecture/ --- aircraft wing stall characteristics
p0176 A78-23295
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19048
Laminar flow control overview
p0448 N78-27066
Development of advanced stability theory suction prediction techniques for laminar flow control --- on swept wings
p0449 N78-27068
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
Toward a laminar-flow-control transport
p0449 N78-27071
Application of porous materials for laminar flow control
p0449 N78-27072
Calculation of laminar boundary layers on infinite swept wings based on Thwaites two-dimensional method
[FFA-AU-1431] p0488 N78-28061
LAMINAR BOUNDARY LAYER SEPARATION
U LAMINAR BOUNDARY LAYER
LAMINAR FLAMES
U LAMINAR FLOW
LAMINAR FLOW
NT BLASIUS FLOW
NT STRATIFIED FLOW
Analysis and calculation of plane skew symmetric contours of second-order smoothness --- for channel surface design
p0174 A78-22636
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376
A perspective of laminar-flow control --- aircraft energy efficiency program
[AIAA PAPER 78-1528] p0481 A78-46503
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
Experiments on the laminar flow in a rectangular streamwise corner
p0600 A78-53765
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
Application of laminar flow control to large subsonic military transport airplanes
[AD-A052422] p0394 N78-24098
Drag reduction for gliders
[NASA-TM-75293] p0396 N78-24116
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
LAMINAR FLOW AIRFOILS
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
Material development for laminar flow control wing panels
p0218 A78-25200
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
Numerical study of laminar unsteady flow over airfoils
p0358 N78-23049
LAMINAR FLOW CONTROL
U BOUNDARY LAYER CONTROL
U LAMINAR BOUNDARY LAYER
LAMINAR JETS
U JET FLOW
U LAMINAR FLOW
LAMINAR WAKES
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
Laminar hypersonic wake of a lifting body
p0426 A78-42763
LAMINATED MATERIALS
U LAMINATES
LAMINATES
Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
Integrally stiffened laminate construction
p0370 A78-36431
Determination of the principal mechanical properties of reinforced plastic laminates for aircraft
[AD-A043350] p0044 N78-11201
A general study of hybrid composite laminates --- airframe materials
[AD-A048364] p0266 N78-19208
LAMINATIONS
U LAMINATES
LAMPS PROGRAM
U LIGHT AIRBORNE MULTIPURPOSE SYSTEM
LAND USE
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
Planning and design of small airports in Canada
p0341 A78-35668
LANDING
NT AIRCRAFT LANDING
NT CRASH LANDING
NT DITCHING (LANDING)
NT SPACECRAFT LANDING
NT VERTICAL LANDING

Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111

LANDING AIDS
NT AIRPORT BEACONS
NT AIRPORT LIGHTS
NT ALL-WEATHER LANDING SYSTEMS
NT APPROACH INDICATORS
NT ARRESTING GEAR
NT AUTOMATIC LANDING CONTROL
NT INSTRUMENT LANDING SYSTEMS
NT LANDING INSTRUMENTS
NT MICROWAVE LANDING SYSTEMS
NT MICROWAVE SCANNING BEAM LANDING SYSTEM
NT RUNWAY LIGHTS
Display augmentation in manual control of remotely piloted vehicles
p0231 A78-28148
Landing systems - The Navy viewpoint
p0281 A78-30097
Soviet landing aid draws FAA scrutiny --- laser approach guidance
p0381 A78-38773
Onboard radio-navigation and landing aids for aircraft --- Russian book
p0473 A78-44806
A systems approach to heliport lighting
p0523 A78-49238
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Current and future navigation and landing systems
p0569 A78-50265
The Turboclair process --- fog dispersal techniques
p0571 A78-50449
A system concept of metering and spacing --- for aircraft landing approach
p0595 A78-52968
Test report on the application of the Linde fog removal equipment at the Erding air base --- Germany
[DLR-IB-75/8] p0145 N78-14763
Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] p0246 N78-18083
Requirements for VLA systems
p0260 N78-19118
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
Precise enroute navigation based on ground-derived techniques
p0315 N78-21078
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
The effect of landing system coverage and path geometry on lateral position errors at the runway threshold
[NASA-TM-78744] p0451 N78-27100
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
Parameters of future ATC systems relating to airport capacity/delay
[AD-A055482] p0566 N78-31130

LANDING GEAR
On the application of dual-phase damping to landing gears
p0123 A78-19405
Description of transient motion of aviation mechanisms with double-winding electromagnetic clutches
p0220 A78-25584
Optimum design of a landing gear shock absorber system
p0224 A78-26480
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0282 A78-30259
The technical concepts behind the IL-62M /8/ landing gear
p0371 A78-36622
Landing gear kinematics
p0468 A78-43762
Verification of landing gear design strength
[SAE AIR 1494] p0472 A78-44701
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Comparison of linear and nonlinear dampers for landing gears
p0590 A78-51947
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
Advanced technology helicopter landing gear
[AD-A048891] p0261 N78-19124
Civil components program "Wing Section'. Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0411 N78-25455
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
Summary of NASA landing-gear research
p0497 N78-29056
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095

LANDING INSTRUMENTS
NT APPROACH INDICATORS
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
Probabilistic model of an instrument landing system
p0509 A78-47407
Use of the U.S. interim standard microwave landing system in Canada
p0523 A78-49333

LANDING LOADS
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052
Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115

LANDING MATS
Model study of dynamic response of landing mat
p0117 A78-18755

LANDING SIMULATION
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Model study of dynamic response of landing mat
p0117 A78-18755
Visual flight simulator for the investigation of the learning process during aircraft landing
p0569 A78-50302

LANDING SITES
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101

LANDING SPEED
Comparison of linear and nonlinear dampers for landing gears
p0590 A78-51947

Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115
LANDING SYSTEMS
U LANDING AIDS
LANDSCAPE
U TOPOGRAPHY
LANGLEY COMPLEX COORDINATOR
Operational experience in the Langley expansion tube with various test gases --- for atmospheric entry simulation
[NASA-TM-78637] p0152 N78-15060
LANGMUIR PROBES
U ELECTROSTATIC PROBES
LANGUAGES
NT FORTRAN
NT PROGRAMMING LANGUAGES
LANTHANIDE SERIES METALS
U RARE EARTH ELEMENTS
LAP JOINTS
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
LAPLACE EQUATION
Chordwise variation of vorticity - A comparison of approximations for use in panel methods --- solution to Laplace equation for wing-body configurations
p0130 A78-20194
LARGE SCALE INTEGRATION
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
LARGE SPACE STRUCTURES
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
LASER ANEMOMETERS
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
LASER APPLICATIONS
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
Laser and optical methods of monitoring in aircraft construction --- Russian book
p0281 A78-30123
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
Lasers in aviation --- Russian book on aerospace applications
p0474 A78-45067
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
Laser-gyro strapdown inertial system applications
p0439 N78-26130
Ignition of a liquid fuel under high intensity radiation --- laser weapon systems
[AD-A054974] p0614 N78-32199
LASER COMMUNICATION
U OPTICAL COMMUNICATION
LASER DOPPLER VELOCIMETERS
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
Comparison of prediction of transonic flow in a fan with flow measurements taken using a laser Doppler velocimeter
p0012 A78-12314
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
Laser velocimeter for wind tunnel measurements
p0378 A78-37979
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376
Application of laser velocimetry to aircraft wake-vortex measurements
p0080 N78-12021
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques --- in the Langley V/STOL tunnel
[NASA-TP-1168] p0325 N78-21410
Laser-velocimeter surveys of merging vortices in a wind tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043
LASER GUIDANCE
Soviet landing aid draws FAA scrutiny --- laser approach guidance
p0381 A78-38773
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
LASER OUTPUTS
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235
LASER RADAR
U OPTICAL RADAR
LASER RANGE FINDERS
The pilot's laser --- gas laser rangefinders for aircraft weapons delivery
p0059 A78-15375
LASER RANGER/TRACKER
Douglas Aircraft Company laser tracker
p0124 A78-19436
Wright-Patterson Air Force Base laser tracker
p0124 A78-19437
Multiple laser tracker operations
p0124 A78-19438
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
Navstar GPS field test results
p0530 A78-49856
LASERS
NT CARBON DIOXIDE LASERS
NT DYE LASERS
NT NEODYMIUM LASERS
NT RING LASERS
NT YAG LASERS
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165
LASV
U F-111 AIRCRAFT
LATENESS
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
LATERAL CONTROL
Flying qualities of an aircraft with strong lateral-directional coupling --- application to space shuttle stability control
[AIAA 78-1361] p0484 A78-46550
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control --- in the Langley Unitary Plan Wind Tunnel
[NASA-TP-1124] p0301 N78-20079
LATERAL STABILITY
Analysis of lateral dynamic stability of an

airplane with deformable control systems. II - Numerical analysis
p0108 A78-17642
Lateral stability of a light aircraft during landing
p0167 A78-21020
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
Comment on 'Effect of stabilizer dihedral and static lift on T-tail flutter'
p0416 A78-40800
Constant-control rolling maneuver
p0507 A78-46961
Evolution of a cost-effective, task-oriented, lateral-directional SAS for the A-10 aircraft --- Stability Augmentation System
[AIAA PAPER 78-1460] p0512 A78-47910
Lateral-aerodynamic characteristics of highly-dihedraled wings
p0523 A78-49334
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044

LATERALITY
U LATERAL STABILITY

LATERALIZATION
U LATERAL CONTROL

LATTICES (MATHEMATICS)
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016

LAUNCH COMPLEXES
U LAUNCHING BASES

LAUNCH VEHICLES
NT HEAVY LIFT LAUNCH VEHICLES
NT SINGLE STAGE TO ORBIT VEHICLES

LAUNCHERS
NT AIRCRAFT LAUNCHING DEVICES
NT CATAPULTS
NT MISSILE LAUNCHERS

LAUNCHING
NT AIR LAUNCHING
NT SEA LAUNCHING

LAUNCHING BASES
Launching the Harrier from a ski jump
p0234 A78-28463

LAW (JURISPRUDENCE)
NT INTERNATIONAL LAW
NT LEGAL LIABILITY
NT PUBLIC LAW
British Airways v. Port Authority - Its impact on aircraft noise regulation
p0582 A78-51128
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
Current state of the law in aircraft noise pollution control
p0583 A78-51130

LAWS
NT SCALING LAWS

LEADING EDGE SLATS
Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051

LEADING EDGES
NT BLUNT LEADING EDGES
NT SHARP LEADING EDGES
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
Wind tunnel experiments on a NACA 632-A215 wing profile with boundary layer control through blowing on the leading edge
p0121 A78-19075
Normal force of a flat triangular wing in a supersonic flow
p0278 A78-29720
Remarks on conical supersonic wings with subsonic leading edges
p0333 A78-34016
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
An experimental and computational investigation of a swept-wing flow at subsonic speeds
[AIAA PAPER 78-1200] p0423 A78-41890
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896
Leading edge transition on swept wings
p0144 N78-14336
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
A theroretical investigation of the aerodynamics of low aspect-ratio wings with partial leading-edge separation
p0449 N78-27075
Calculations of the effects of blowing from the leading edges of a cambered delta wing
[ARC-R/M-3800] p0545 N78-30064
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
Effects of wing leading-edge deflection on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration
[NASA-TM-78787] p0622 N78-33047
Estimation of leading-edge thrust for supersonic wings of arbitrary planform
[NASA-TP-1270] p0623 N78-33051

LEAKAGE
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079

LEAR JET AIRCRAFT
Certifying the Learjet to 51,000 feet
p0234 A78-28462
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618

LEAST SQUARES METHOD
A least square finite element technique for transonic flow with shock
[AIAA PAPER 78-328] p0186 A78-24022
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906

LED (DIODES)
U LIGHT EMITTING DIODES

LEE WAVES
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave
p0188 A78-24356

LEGAL LIABILITY
Critical considerations on the legal development of personal liability with attention to air

transportation
p0281 A78-29944
The products-liability movement has improved aviation safety
p0335 A78-34644
International jurisdiction related to the Warsaw Convention during the years from 1974 to 1976. II
p0589 A78-51822
The legal basis for security measures in air traffic
p0589 A78-51823
LEGENDRE CODE
U COMPUTER PROGRAMMING
U NEUTRON SCATTERING
LENSES
NT WIDE ANGLE LENSES
LETHALITY
ALC/50/ values for some polymeric materials --- Apparent Lethal Concentration fire toxicity
p0371 A78-36596
LETTERS (SYMBOLS)
U SYMBOLS
LEVEL (QUANTITY)
NT EFFECTIVE PERCEIVED NOISE LEVELS
LEVELING
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
LIABILITIES
NT LEGAL LIABILITY
LIDAR
U OPTICAL RADAR
LIFE (DURABILITY)
NT FATIGUE LIFE
NT SERVICE LIFE
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
An identification and characterization of cost models/techniques used by Air Force Logistics Command to estimate jet engine operation and support costs
[AD-A044083] p0088 N78-12095
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
Nondestructive pavement evaluation
[AD-A052707] p0400 N78-24159
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
Ceramic technology readiness program
[FE-2664-3] p0457 N78-27279
LIFE CYCLE COSTS
Design to cost/life cycle costing; Proceedings of the Conference, Washington, D.C., November 16-18, 1977
p0169 A78-21838
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
The AN/ARC-164 radio - Life-cycle-cost savings --- UHF communication equipment reliability and maintainability improvement
p0276 A78-29479
Integrally stiffened laminate construction
p0370 A78-36431
FAA facilities maintenance cost reduction model
p0428 A78-43043
Development of cost estimating relationships for aircraft jet core-engine overhaul costs
[AD-A047667] p0209 N78-17067
Life-cycle analysis of aircraft turbine engines
[AD-A050349] p0308 N78-20135
A life cycle cost study of contractor versus organic support of aircraft programs
[AD-A049438] p0312 N78-21045
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
Avionics planning guidance: Executive summary
[AD-A054719] p0500 N78-29098
Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100
LIFE RAFTS
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
LIFETIME (DURABILITY)
U LIFE (DURABILITY)
LIFT
NT INTERFERENCE LIFT
NT JET LIFT
NT ROTOR LIFT
NT ZERO LIFT
A method for determining the induced resistance of wings with high aspect ratio in a subsonic regime
p0120 A78-19065
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
The lifting force of a low-aspect-ratio wing and body combination
p0129 A78-19709
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
Minimisation of relaxation drag
p0374 A78-37423
Flow past nonconical wings with separation
p0377 A78-37775
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
Effects of lengthwise lift distribution on sonic boom of SST configurations

p0018 N78-10010
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012
Analytical study of a free-wing/free-trimmer concept --- for gust alleviation and high lift
[NASA-CR-2946] p0236 N78-18000
Calculation of the lift of partially-stalled wings
[NAL-TR-498T] p0252 N78-19054
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
Static stability of vehicles which use the lifting force of airfoils
[AD-A049069] p0255 N78-19074
Unsteady loads due to propulsive lift configurations. Part A: Investigation of scaling laws
[NASA-CR-156120] p0300 N78-20067
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
An improved version of the NASA-Lockheed multielement airfoil analysis computer program
[NASA-CR-145323] p0301 N78-20077
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Unsteady, surface pressure and near-wave hotwire measurements of a circulation control airfoil
[AD-A050025] p0313 N78-21061
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle
[PB-277674] p0395 N78-24099
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056
Direct lift control for flight path control and gust alleviation
p0434 N78-26072
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
A brief survey of rotary wing induced-velocity theory
[NASA-TM-78741] p0450 N78-27085
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration --- test in the Langley high speed 7- by 10-foot tunnel
[NASA-TM-78686] p0487 N78-28052
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051

LIFT AUGMENTATION
The technical conception of the IL-62M. VII - Landing flap control
p0051 A78-13503
Flow over a wing with an attached free vortex
p0059 A78-15337
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
Experimental research on high lift airfoil section HL235
p0221 A78-25945
F-18A --- configurational development from YF-17 prototype
p0233 A78-28454
YAV-8B/AV-8B advanced Harrier program
p0233 A78-28455
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
The investigation of take-off and landing characteristics of jet shortened take-off and landing aircraft (STOL)
[AD-A044292] p0023 N78-10055
An investigation on thrust vector control --- using a pneumatic technique
[DLR-IB-151-76/15] p0043 N78-11118
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
The performance of a conceptual multimission power-augmented-ram wing-in-ground effect vehicle
[AD-A051433] p0359 N78-23064
Powered-Lift Aerodynamics and Acoustics --- conferences
[NASA-SP-406] p0389 N78-24046
Overview of powered-lift technology --- as used on the YC-14 aircraft and C-15 aircraft
p0389 N78-24047
Upper-surface-blowing flow-turning performance
p0389 N78-24048
Results of static tests of a 1/4 scale model of the Boeing YC-14 powered-lift system
p0389 N78-24049
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Externally blown flap impingement parameters
p0390 N78-24053
Some measurements of an EBF powered-lift wake
p0390 N78-24054
Aerodynamic characteristics in ground proximity
p0390 N78-24055
Distributed upper-surface blowing concept
p0390 N78-24056
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059

USB flow characteristics related to noise generation
p0391 N78-24060
Characteristics of USB noise
p0391 N78-24061
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
Overview of the QCSEE program
p0392 N78-24066
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068
Inlet technology for powered-lift aircraft
p0392 N78-24069
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
Investigations of scaling laws for jet impingement
p0393 N78-24074
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076

LIFT COEFFICIENTS
U AERODYNAMIC COEFFICIENTS
U LIFT

LIFT DEVICES
Transonic flows past a lift profile
p0274 A78-28961
Mitsubishi Passenger Transfer Vehicle Model 150
p0429 A78-43298
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094

LIFT DISTRIBUTION
U FORCE DISTRIBUTION
U LIFT

LIFT DRAG RATIO
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes --- for helicopters
p0126 A78-19639
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Optimum tail plane design for artificially stabilized aircraft
p0276 A78-29334
Generalized area rules and integral theorems for hypersonic wing-bodies
p0571 A78-50461
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
A study of the lift-to-drag ratio capability of caret wing waveriders
[AD-A053691] p0498 N78-29069

LIFT FANS
Lift/cruise fan VTOL aircraft
p0076 A78-16695
Dynamic response of lift fans subject to varying backpressure --- for Surface Effect Ships
[AIAA PAPER 78-756] p0292 A78-32176
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14998
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
Study of the application of an implicit model-following flight controller to lift-fan VTOL aircraft
[NASA-TP-1040] p0199 N78-16063
Test data report, low speed wind tunnel tests of a full scale lift/cruise-fan inlet, with engine, at high angles of attack
[NASA-CR-152055] p0252 N78-19049
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112
A brief survey of rotary wing induced-velocity theory
[NASA-TM-78741] p0450 N78-27085

LIFT FORCES
U LIFT

LIFTING BODIES
NT LIFTING REENTRY VEHICLES
NT X-24 AIRCRAFT
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
Transonic integral equation formulation for lifting profiles and wings
p0113 A78-18238
Numerical study of transonic profiles
p0120 A78-19061
Determination of the aerodynamic forces for an aeroelastic analysis of lifting surfaces
p0120 A78-19064
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
Asymptotic theory of a wing moving at small distances from a solid wall
p0133 A78-20462
Reliable lifting surface solutions for unsteady flow
[AIAA PAPER 78-228] p0161 A78-20757
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Approximate method of calculating subsonic compressible flows past a lifting wing profile
p0164 A78-20883
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils
[AIAA PAPER 78-11] p0171 A78-22553
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation --- German book
p0175 A78-22937
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
Prediction of the unsteady airloads on oscillating lifting systems and bodies for aeroelastic analyses
p0333 A78-34087
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
Aerodynamics of slender lifting surface in accelerated flight
p0416 A78-40836
Laminar hypersonic wake of a lifting body
p0426 A78-42763
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
Asymptotic theory of a wing moving near a solid wall
p0518 A78-48248
Integral equation formulation for transonic flow past lifting wings
p0571 A78-50459
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673

Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
LIFTING REENTRY VEHICLES
NT X-24 AIRCRAFT
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
LIFTING ROTORS
NT BEARINGLESS ROTORS
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
Computation of inductive velocity in the plane of a lightly loaded lifting propeller
p0127 A78-19658
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
The feasibility of the jet-flap rotor as a lift generator for vertical takeoff and landing aircraft
[AD-A050214] p0307 N78-20125
LIFTING SURFACES
U LIFT DEVICES
U LIFTING BODIES
U SURFACES
LIGHT (VISIBLE RADIATION)
NT LIGHT BEAMS
LIGHT AIRBORNE MULTIPURPOSE SYSTEM
Black Hawk, Lamps and AAH
p0225 A78-26533
LIGHT AIRCRAFT
NT DO-28 AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
NT OH-6 HELICOPTER
NT OH-58 HELICOPTER
NT PIPER AIRCRAFT
NT YAK 40 AIRCRAFT
Analysis of aviation accidents with light planes and helicopters
p0053 A78-14084
Some opportunities in the development of light aircraft
p0112 A78-18036
Multiple control input design for identification of light aircraft
p0114 A78-18466
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
Lateral stability of a light aircraft during landing
p0167 A78-21020
Flight on 0.33 horsepower - The Gossamer Condor
[AIAA PAPER 78-308] p0184 A78-24009
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959
The certification of light aircraft
p0369 A78-36280
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
Combined military and commercial application of light helicopters
p0262 N78-19136
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063
LIGHT ALLOYS
NT ALUMINUM ALLOYS
NT BERYLLIUM ALLOYS
Basic fatigue curves of aircraft structures
p0283 A78-30356
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics --- A-U461, A-U26N T6
[AAAF-NT-77-35] p0403 N78-24587
LIGHT BEAMS
Self-focusing of a Gaussian beam in a supersonic gas flow
p0585 A78-51387
LIGHT COMMUNICATION
U OPTICAL COMMUNICATION
LIGHT EMISSION
NT FLUORESCENCE
NT SHOCK WAVE LUMINESCENCE
NT X RAY FLUORESCENCE
LIGHT EMITTING DIODES
Application of light-emitting diodes /LEDs/ in aircraft analog indicators
p0176 A78-23059
LIGHT INTENSITY
U LUMINOUS INTENSITY
LIGHT PROBES
U LIGHT BEAMS
LIGHT TRANSMISSION
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145
LIGHTING EQUIPMENT
NT AIRCRAFT LIGHTS
NT AIRPORT LIGHTS
NT RUNWAY LIGHTS
NT XENON LAMPS
Lighting in airport terminals
p0072 A78-16279
A systems approach to heliport lighting
p0523 A78-49238
LIGHTNING
Aircraft lightning vulnerability testing
p0062 A78-15585
Protection for aircraft --- from lightning
p0072 A78-16274
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861

Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
The lightning environment
p0035 N78-11025
Aircraft lightning attachment phenomena
p0035 N78-11026
Lightning strike experience
p0035 N78-11027
Lightning effects on aircraft
p0035 N78-11028
Direct effects protection
p0035 N78-11029
Fuel system protection
p0035 N78-11030
Structures protection
p0035 N78-11031
Voltages and currents induced by lightning
p0035 N78-11032
The external magnetic field environment
p0036 N78-11033
Examples of induced voltages measured on aircraft
p0036 N78-11038
Design to minimize indirect effects
p0036 N78-11039
Test techniques for evaluation of indirect effects
p0036 N78-11041
FAA lightning protection study: Lightning protection requirements for Wilcox Mark I/D instrument landing system
[AD-A043907] p0036 N78-11044
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655

LIGHTNING SUPPRESSION
Protection of systems avionics against atmospheric electricity hazards - Lightning and static electricity
p0065 A78-15652

LIMITATIONS
U CONSTRAINTS

LIMITER CIRCUITS
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117

LINE OF SIGHT COMMUNICATION
Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439
Applications for airborne digital communications
p0590 A78-51896

LINEAR ARRAYS
NT ENDFIRE ARRAYS
NT YAGI ANTENNAS
Ku Band linear phased array
p0003 A78-11821

LINEAR EQUATIONS
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443

LINEAR FILTERS
NT KALMAN FILTERS
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270

LINEAR PREDICTION
Analytic construction of part-throttle GTE characteristics
p0049 A78-13170

LINEAR PROGRAMMING
Study on problems of terminal site location --- environmental effects on airport, harbor or truck depot
p0369 A78-36323
Optimization of the structure of the LOT Polish Airlines fleet for the requirements of international passenger transport
p0588 A78-51598

LINEAR SYSTEMS
Design of multivariable PID controllers with application to a gas-turbine --- Proportional Integral Derivative
p0072 A78-16308
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
New frequency domain methods for system identification
p0182 A78-23883
Optimal controls for an advanced turbofan engine
p0183 A78-23893
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- application to Augmentor Wing Jet STOL Research Aircraft flare control autopilot design
p0184 A78-23917
Sensitivity reduction in aircraft control systems
p0285 A78-31034
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
Linear machine power requirements and system comparisons --- for German magnetic levitation revenue vehicles
p0585 A78-51271
Effect of digitally computed drives on performance of continuous linear systems
[NASA-TM-D-8518] p0022 N78-10045
Amplification of distortions in an axial compressor stage
p0046 N78-11983

LINEAR VIBRATION
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
Effects of structural non-linearities on aircraft vibration and flutter
[AGARD-R-665] p0211 N78-17076

LINEARIZATION
Linearized theory of plane, unsteady, supersonic flow through a cascade - Subsonic part of the leading edge
[ONERA, TP NO. 1978-103] p0508 A78-47347

LINERS
U LININGS

LINES (GEOMETRY)
NT GEODESIC LINES

LING-TEMCO-VOUGHT AIRCRAFT
NT A-7 AIRCRAFT
NT F-8 AIRCRAFT

LININGS
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876

LIQUEFACTION
NT COAL LIQUEFACTION

LIQUEFIED GASES
NT LIQUEFIED NATURAL GAS
NT LIQUID HYDROGEN
NT LIQUID OXYGEN
Aviation fuels beyond the 1980's --- liquefied gases and synthetic fuels
[NASA-TM-79510] p0442 N78-26223

LIQUEFIED NATURAL GAS
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897

LIQUID CHROMATOGRAPHY
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
[NASA-TM-73829] p0101 N78-13233

LIQUID COOLING
NT FILM COOLING
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
Energy economy with high temperature gasturbine
p0575 A78-50604
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008

Liquid-cooling technology for gas turbines review and status
[NASA-TM-78906] p0441 N78-26145
LIQUID CRYSTALS
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062
Development of a programmable panel
[AD-A048469] p0258 N78-19098
Detection of flaws in metallic and non-metallic composite structures using liquid crystal technology
p0445 N78-26480
LIQUID HYDROGEN
Current and future fuels for transport aircraft
p0116 A78-18669
Hydrogen fueled subsonic aircraft - A prospective
p0118 A78-18843
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
LIQUID OXYGEN
Technical-analytical assistance now even in the field --- transportable lab for analysis of jet fuels and liquid oxygen supplies
p0119 A78-19053
LIQUID ROCKET PROPELLANTS
NT SLURRY PROPELLANTS
LIQUID-GAS MIXTURES
NT AEROSOLS
NT FOG
Mechanism of pulsating combustion of the liquid fuel fed to the airflow through the circulation zone behind the flame stabilizer
p0581 A78-50788
LIQUIDS
NT HYDRAULIC FLUIDS
NT LIQUEFIED GASES
NT LIQUID HYDROGEN
NT LIQUID OXYGEN
NT SLURRY PROPELLANTS
LITERATURE
Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
LITHERGOLIC PROPELLANTS
U HYBRID PROPELLANTS
LITHIUM COMPOUNDS
Aluminous keatite - A durable ceramic material for rotary regenerator cores --- for automotive gas turbine engines
p0574 A78-50588
LNG
U LIQUEFIED NATURAL GAS
LOAD DISTRIBUTION (FORCES)
An appreciation of the dynamic problems associated with the external transportation of loads from a helicopter - State of the art
p0114 A78-18429
Distributed load aircraft concepts
[AIAA PAPER 78-100] p0172 A78-22573
Ideal tail load for minimum aircraft drag
p0231 A78-28149
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
LOAD FACTORS
U LOADS (FORCES)
LOAD TESTING MACHINES
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
LOAD TESTS
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
Quick bearing strength tests for concrete pavements
p0469 A78-44224
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
Proposed load evaluation system for U.S. Air Force --- of airfield pavement
p0526 A78-49677
Airfield pavement evaluation - The airline view
p0526 A78-49680
LOADING FORCES
U LOADS (FORCES)
LOADING WAVES
U ELASTIC WAVES
U LOADS (FORCES)
LOADS (FORCES)
NT AERODYNAMIC LOADS
NT AXIAL LOADS
NT BLAST LOADS
NT COMPRESSION LOADS
NT CRITICAL LOADING
NT CYCLIC LOADS
NT DYNAMIC LOADS
NT GUST LOADS
NT LANDING LOADS
NT RANDOM LOADS
NT ROLLING CONTACT LOADS
NT SHOCK LOADS
NT STATIC LOADS
NT VIBRATORY LOADS
NT WING LOADING
Effect of fighter attack spectrum on crack growth
[AD-A042369] p0037 N78-11054
Systematic investigation of models of helicopter with a slung load
p0149 N78-15026
Stability of helicopter slung loads
[ARL/AERO-NOTE-364] p0196 N78-16040
Fatigue load monitoring
p0242 N78-18052
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
Limitations of the UTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
Analysis and synthesis of operational loads --- aircraft structures
[ISD-193] p0310 N78-20551
Bearingless tail rotor loads and stability
[AD-A049579] p0317 N78-21098
Application to life prediction of design data derived from fatigue tests with service-like load sequences
[RAE-LIB-TRANS-1939] p0356 N78-22388
On the detection and measurement of cracks in critically loaded holes
p0444 N78-26469
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
Development of a load sequence for a structural fatigue test
p0554 N78-30277

Load interaction effects in fatigue crack propagation
p0555 N78-30285
Assessment of load alleviation devices installed on a power-augmented-ram wing over irregular waves
[AD-A045425] p0622 N78-33049
LOCALIZATION
U POSITION (LOCATION)
LOCATION
U POSITION (LOCATION)
LOCKHEED AIRCRAFT
NT C-5 AIRCRAFT
NT C-130 AIRCRAFT
NT C-140 AIRCRAFT
NT C-141 AIRCRAFT
NT L-1011 AIRCRAFT
NT P-3 AIRCRAFT
NT U-2 AIRCRAFT
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
LOCKHEED C-5 AIRCRAFT
U C-5 AIRCRAFT
LOCKHEED U-2 AIRCRAFT
U U-2 AIRCRAFT
LOGIC CIRCUITS
A reliable modular automatic system adapted to avionics controls: Design through successive refinements - Production --- French book
p0281 A78-30024
LOGMOD - The fault-isolator --- for helicopter electronic systems
p0523 A78-49239
B-1 EMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092
LOGIC DESIGN
Design and implementation of mode control logic in digital autopilots
[AIAA 77-1488] p0005 A78-12238
LOGIC NETWORKS
U LOGIC CIRCUITS
LOGICAL ELEMENTS
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
LOGISTICS
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
Is production of the CH-53E helicopter warranted
[PB-278815/6] p0453 N78-27116
LOGISTICS MANAGEMENT
NT INVENTORY MANAGEMENT
Environmental tests and logistics support costs
p0061 A78-15560
Engineering methods in engine management
p0112 A78-18021
Digital avionics support - A retrospective view of the future
p0533 A78-49903
An investigation into the nature of aircraft supportability in the CILC environment
[AD-A047226] p0193 N78-15991
An evaluation of the capability of the logistics composite model to project the monthly aircraft sortie effectiveness of an F-15 wing
[AD-A047227] p0193 N78-15993
Three degree intermediate level maintenance of Navy aeronautical materials
[AD-A052389] p0389 N78-24042
Life cost management, methodology, and case studies
[AD-A052388] p0404 N78-24999
Logistics and operational effectiveness of the P-3 aircraft
[AD-A052239] p0404 N78-25050
A study of the F-4 Program Management Responsibility Transfer (PMRT) from the Air Force Systems Command to the Logistics Command
[AD-A052903] p0413 N78-25974
Avionics planning guidance: Executive summary
[AD-A054719] p0500 N78-29098
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report
[AD-A054016] p0550 N78-30119
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097
LOH HELICOPTER
U OH-6 HELICOPTER
LONG RANGE NAVIGATION
U LORAN
LONG TERM EFFECTS
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
LONGITUDINAL CONTROL
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
Analytical design of an automaton for the longitudinal control of an aircraft
p0292 A78-32262
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
Phugoid characteristics of a YP-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
Flight test of stick force stability in attitude-stabilized aircraft
[NLR-MP-77015-U] p0246 N78-18080
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138
Pitch rate flight control for the F-16 aircraft to improve air-to-air combat
[AD-A055417] p0612 N78-32107
LONGITUDINAL STABILITY
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
Static and dynamic stability --- aircraft longitudinal control
p0332 A78-33588
Dynamics of the longitudinal motion of an airplane with a variable-geometry wing
p0523 A78-49285
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration --- in the Langley V/STOL tunnel
[NASA-TP-1090] p0092 N78-13014
Low-speed wind-tunnel tests of the longitudinal stability characteristics of some swept-wing quiet Airbus configurations
[ARC-R/M-3801] p0141 N78-14042
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
Aircraft compensator design methods
[AD-A047814] p0210 N78-17073
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle

[PB-277674] p0395 N78-24099
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050
Simulation study of the oscillatory longitudinal motion of an airplane at the stall
[NASA-TP-1242] p0552 N78-30141

LONGITUDINAL WAVES
NT PLANE WAVES

LOOK ANGLES (TRACKING)
Multipath limitations on low-angle radar tracking
p0222 A78-26157

LORAN
NT LORAN C
New organization of air traffic over the North Atlantic region
p0588 A78-51599

LORAN C
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075

LOW ALLOY STEELS
U HIGH STRENGTH STEELS

LOW ALTITUDE
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
Guidance and control design considerations for Low-Altitude and Terminal-Area Flight
[AGARD-CP-240] p0431 N78-26049
Guidance and control for low level offensive aircraft: A Royal Air Force view
p0431 N78-26050
Open-loop compensation of wind-shear effects in low level flight
p0431 N78-26052
Proposal for a cost effective radar navigation system for low altitude and terminal area flight
p0431 N78-26057
Design considerations for a ground avoidance monitor for fighter aircraft
p0432 N78-26058
System integration and safety monitoring to achieve integrity in low altitude flight control systems
p0432 N78-26059
Terrain following criteria: The need for a cannon measure
p0432 N78-26060
The analysis of operational mission execution: An assessment of low-altitude performance, navigation accuracy and weapon delivery performance
p0433 N78-26070
Navigation system aspects of low altitude flight
p0434 N78-26073

LOW ASPECT RATIO
Evaluation of a low aspect ratio small axial compressor stage, volume 1
[NASA-CR-135240] p0086 N78-12081
Evaluation of a low aspect ratio small axial compressor stage, volume 2
[NASA-CR-135241] p0086 N78-12082
Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387
Movement of a wing with a small aspect ratio near the interface of fluids with different densities
[AD-A045921] p0145 N78-14348
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface --- YF-12A ventral fins
p0605 N78-32058

LOW ASPECT RATIO WINGS
NT DELTA WINGS
NT TRAPEZOIDAL WINGS
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
The lifting force of a low-aspect-ratio wing and body combination
p0129 A78-19709
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251
Three-dimensional hypersonic gas flow past a thin wing
p0163 A78-20795
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
Three-dimensional flow of hypersonic gas past a thin airfoil
p0281 A78-30002
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
A theroretical investigation of the aerodynamics of low aspect-ratio wings with partial leading-edge separation
p0449 N78-27075
Aerodynamic characteristics of a jet sheet vortex generator --- wind tunnel tests using thin, low aspect ratio wings
[NASA-CR-158904] p0487 N78-28054

LOW COST
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087

LOW DENSITY FLOW
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857

LOW DENSITY MATERIALS
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] p0457 N78-27184

LOW FREQUENCIES
Low frequency augmentor instability study --- afterburning effects in turbofan engines
[AIAA PAPER 78-996] p0464 A78-43543
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2 --- jet aircraft noise
[NASA-CR-145262] p0404 N78-24900
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873

LOW GRAVITY
U REDUCED GRAVITY

LOW LEVEL TURBULENCE
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
An investigation into the effects of shear on the flow past bluff bodies
[AIAA PAPER 78-331] p0186 A78-24025
The Low-Level Wind Shear Alert Program
p0187 A78-24346

LOW PRESSURE
Ignition of liquid fuel sprays at subatmospheric pressures
p0470 A78-44268

LOW SPEED
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924

Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828

LOW SPEED STABILITY
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141

LOW SPEED WIND TUNNELS
NT SUBSONIC WIND TUNNELS
The low-speed air tunnel of the Institute of Hydromechanics at the University of Karlsruhe
p0176 A78-23297
Experimental research on high lift airfoil section HL235
p0221 A78-25945
Determination of high attitude wall corrections in a low speed wind tunnel
[AIAA 78-810] p0296 A78-32364
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
Optimum design of wind tunnel contractions
[AIAA 78-819] p0297 A78-32373
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
Low speed test of a high-bypass-ratio propulsion system with an asymmetric inlet designed for a tilt-nacelle V/STOL airplane
[NASA-CR-152072] p0209 N78-17062

LOW THRUST PROPULSION
NT MAN OPERATED PROPULSION SYSTEMS
NT PHOTONIC PROPULSION
NT SOLAR PROPULSION

LOW VELOCITY
U LOW SPEED

LOW VISIBILITY
Vertical fog classifications and slant/runway visual range ratios
p0056 A78-14997
The Turboclair process --- fog dispersal techniques
p0571 A78-50449
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet --- low visibility regimes
[AD-A052870] p0452 N78-27103

LOW WING AIRCRAFT
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922

LOWER ATMOSPHERE
NT OZONOSPHERE
NT TROPOSPHERE

LOX (OXYGEN)
U LIQUID OXYGEN

LSI
U LARGE SCALE INTEGRATION

LUBRICANT TESTS
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054

LUBRICANTS
NT LUBRICATING OILS
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051

LUBRICATING OILS
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DET-33] p0135 A78-20598
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
Steady-state unbalance response of a three-disk flexible rotor on flexible, damped supports
p0275 A78-29326
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
Estimating the service life of rolling contact bearings when synthetic oils are used --- in aircraft gas turbine engines
p0334 A78-34324
Circumferential seals for use as oil seals
[ASLE PREPRINT 78-AM-3D-2] p0378 A78-38095
Effectiveness of the real time ferrograph and other oil monitors as related to oil filtration
[AD-A049334] p0308 N78-20134
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080

LUBRICATION
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
Emergency and microfog lubrication and cooling of bearings for Army helicopters
[NASA-CR-135195] p0459 N78-27429

LUBRICATION SYSTEMS
Twenty year evolution of the WR2/WR24 series of small turbojet engines
[SAE PAPER 770998] p0181 A78-23833

LUDER BANDS
U PLASTIC DEFORMATION

LUGS
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943

LUMINAIRES
NT AIRCRAFT LIGHTS
NT AIRPORT LIGHTS
NT RUNWAY LIGHTS
NT XENON LAMPS

LUMINESCENCE
NT FLUORESCENCE
NT SHOCK WAVE LUMINESCENCE
NT X RAY FLUORESCENCE

LUMINESCENT INTENSITY
U LUMINOUS INTENSITY
LUMINOUS FLUX DENSITY
U LUMINOUS INTENSITY
LUMINOUS INTENSITY
ASD strobe light evaluation --- luminous intensity requirements for aircraft anticollision lights
[AD-A045533] p0095 N78-13036

M

M WINGS
U VARIABLE SWEEP WINGS
MACH CONES
The location of the ground focus line produced by a supersonic aircraft
p0178 A78-23457
MACH NUMBER
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
Mach number and temperature effects on jets
[AIAA PAPER 78-1152] p0476 A78-45134
Review of problems in application of supersonic combustion
p0017 N78-10007
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
MACHINE LIFE
U SERVICE LIFE
MACHINE STORAGE
U COMPUTER STORAGE DEVICES
MACHINE TOOLS
A new method for cutting honeycomb and composite materials for structural members
p0077 A78-16875
MACHINING
NT ELECTROCHEMICAL MACHINING
Introduction of NC machines in aircraft industry
p0123 A78-19411
MAGNESYN (TRADEMARK)
U SERVOMOTORS
MAGNETIC CONTROL
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
MAGNETIC DIFFUSION
The internal magnetic fields created by diffusion
p0036 N78-11034
MAGNETIC DISTURBANCES
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
MAGNETIC FIELD INTENSITY
U MAGNETIC FLUX
MAGNETIC FIELDS
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
The external magnetic field environment
p0036 N78-11033
The internal magnetic fields created by diffusion
p0036 N78-11034
The internal fields coupled through apertures
p0036 N78-11035
Voltages and currents induced on wiring
p0036 N78-11036
MAGNETIC FLUX
The external magnetic field environment
p0036 N78-11033
MAGNETIC INDUCTION
EMP induced currents on a simplified missile theory and experiment
p0385 A78-39109
MAGNETIC LEVITATION VEHICLES
Linear machine power requirements and system comparisons --- for German magnetic levitation revenue vehicles
p0585 A78-51271
Numerical calculation of magnetic levitation systems
p0600 A78-53805
MAGNETIC MATERIALS
Preliminary investigation into the application of magnetic rubber inspection (M.R.I.)
[NLR-TR-76083-U] p0445 N78-26507
MAGNETIC METALS
U MAGNETIC MATERIALS
U METALS
MAGNETIC PERMEABILITY
Surface corrosion evaluation by relative magnetic susceptibility measurements
p0443 N78-26466
MAGNETIC PROPERTIES
NT MAGNETIC INDUCTION
NT MAGNETIC PERMEABILITY
NT MAGNETIC SUSPENSION
MAGNETIC RESONANCE
NT NUCLEAR MAGNETIC RESONANCE
MAGNETIC SUSPENSION
Numerical calculation of magnetic levitation systems
p0600 A78-53805
MAGNETIC TAPE TRANSPORTS
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
MAGNETOHYDRODYNAMIC GENERATORS
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
MAGNETOHYDRODYNAMIC STABILITY
Ballooning stability boundaries for the large-aspect-ratio tokamak
p0599 A78-53664
MAGNETOMETERS
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
Aircraft attitude measurement using a vector magnetometer
[NASA-CR-155565] p0207 N78-17050
MAGNETS
NT ELECTROMAGNETS
NT HIGH FIELD MAGNETS
Application of rare earth/transition metal permanent magnets to 400 Hz aircraft systems - An AF overview
p0535 A78-49935
MAGNUS EFFECT
Magnus effects on ballistic trajectories
[AD-A048966] p0254 N78-19071
MAINTAINABILITY
'New look' in assurance technology - 'The Hornet' --- reliability and maintainability of F-18
[AIAA PAPER 78-323] p0185 A78-24017
Economic and safety aspects of prolonging engine life
p0217 A78-25142
The AN/ARC-164 radio - Life-cycle-cost savings --- UHF communication equipment reliability and maintainability improvement
p0276 A78-29479
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
An investigation into the nature of aircraft supportability in the CILC environment
[AD-A047226] p0193 N78-15991
MAINTENANCE
NT AIRCRAFT MAINTENANCE
NT SPACE MAINTENANCE

A Flight Line Computer Loader/Test Controller for improved avionic maintenance
p0068 A78-15701
Remote maintenance monitor systems --- for air navigation equipment
p0111 A78-17911
Maintenance of gas turbine accessory equipment
p0597 A78-53175
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170

MALFUNCTIONS
LOGMOD - The fault-isolator --- for helicopter electronic systems
p0523 A78-49239

MAN MACHINE SYSTEMS
The role of cockpit simulators in the integration of pilot/controller ATC system related avionics and procedures
[AIAA 77-1516] p0010 A78-12284
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791
Current problems of flight simulators for research
p0275 A78-29214
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Piloting and control systems for airplanes and helicopters --- Russian book
p0485 A78-46565
A hierarchical network for avionic systems
p0532 A78-49868
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
System measurement improves computer responses to the controller --- for air traffic control
p0596 A78-52974
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
A comparison of integrated and conventional cockpit warning systems --- pilot performance and reaction time in man machine systems
[AD-A048670] p0239 N78-18022
Pilot centered requirements in control/display design
p0259 N78-19110

MAN OPERATED PROPULSION SYSTEMS
Flight on 0.33 horsepower - The Gossamer Condor
[AIAA PAPER 78-308] p0184 A78-24009

MANAGEMENT
NT CONFIGURATION MANAGEMENT
NT CONTRACT MANAGEMENT
NT DATA MANAGEMENT
NT ENGINEERING MANAGEMENT
NT FINANCIAL MANAGEMENT
NT INFORMATION MANAGEMENT
NT INVENTORY MANAGEMENT
NT LOGISTICS MANAGEMENT
NT PERSONNEL MANAGEMENT
NT PROCUREMENT MANAGEMENT
NT PRODUCTION MANAGEMENT
NT PROJECT MANAGEMENT
NT RESEARCH MANAGEMENT
NT RESOURCES MANAGEMENT
NT SAFETY MANAGEMENT
NT SYSTEMS MANAGEMENT
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536

MANAGEMENT INFORMATION SYSTEMS
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981

MANAGEMENT METHODS
Design to cost/life cycle costing; Proceedings of the Conference, Washington, D.C., November 16-18, 1977
p0169 A78-21838
Monitoring airline performance
p0332 A78-33587
F-106 scheduled maintenance improvement summary --- management methods
[AD-A045400] p0092 N78-13002

MANAGEMENT PLANNING
NT PRODUCTION PLANNING
NT PROJECT PLANNING
Strategic or tactical air traffic control
p0570 A78-50447
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
Terminal area forecast 1978-1988
[AD-A046543] p0195 N78-16027
Army aviation RDT and E plan, sixth edition
[AD-A049214] p0271 N78-20010
Army aviation RDT and E plan. Sixth edition: Executive summary
[AD-A049213] p0271 N78-20012
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981

MANAGEMENT SYSTEMS
NT MANAGEMENT INFORMATION SYSTEMS
AIDS in engine management programmes --- Airborne Integrated Data Systems
p0510 A78-47865

MANEUVERABILITY
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
VTOL aircraft dynamics --- Russian book
p0598 A78-53428
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
An investigation on thrust vector control --- using a pneumatic technique
[DLR-IB-151-76/15] p0043 N78-11118
Supercruiser fighter analysis
p0549 N78-30107
Analysis of advanced variable camber concepts
p0549 N78-30108

MANEUVERABLE SPACECRAFT
NT LIFTING REENTRY VEHICLES

MANEUVERS
NT AIRCRAFT MANEUVERS
NT EVASIVE ACTIONS
NT SIDESLIP

MANIFOLDS
Gas-turbine-engine piping --- Russian book
p0070 A78-15941

MANNED SPACE FLIGHT
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977

MANNED SPACECRAFT
NT SOYUZ SPACECRAFT
NT SPACE SHUTTLES

MANUAL CONTROL
NT VISUAL CONTROL
One axis artificial feel system --- pilot proprioceptive cue forces on aircraft joy stick
p0224 A78-26488
Display augmentation in manual control of remotely piloted vehicles

p0231 A78-28148
A feasibility study of a manual bomb release while in a turn
[AD-A048882] p0261 N78-19123
Simulation and development possibilities of the manual control concept in the near range and control zone
p0304 N78-20104
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
MANUALS
NT USER MANUALS (COMPUTER PROGRAMS)
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
MANUFACTURING
NT SPACE MANUFACTURING
New production methods gain --- in engine manufacturing for U.S. aerospace industry
p0598 A78-53239
MAP MATCHING GUIDANCE
A parametric analysis of TERCOM false fix probability --- TERrain COntour Matching
p0539 A78-49997
Advanced pattern matching for navigation and guidance
p0539 A78-49998
MAPPING
NT CADASTRAL MAPPING
NT THERMAL MAPPING
NOISEMAP computer program operator manual. Addendum for version 3.4 of NOISEMAP
[AD-A049070] p0271 N78-19849
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
MAPS
COMED - The cockpit display of the future --- COmbined Map and Electronic Display
p0508 A78-47268
MARAGING STEELS
Medium and high resistance steels
[AAAP-NT-77-36] p0355 N78-22223
MARINE ENVIRONMENTS
A method of predicting stress corrosion cracking
p0468 A78-44105
Coatings for aircraft which operate in marine environments
p0468 A78-44113
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
MARINE NAVIGATION
U SURFACE NAVIGATION
MARINE TECHNOLOGY
Positioning and navigation by satellite --- for marine operations
[AIAA 77-1553] p0051 A78-13684
MARITIME COMMUNICATION SATELLITE (ESA)
U MAROTS (ESA)
MARITIME ORBITAL TEST SATELLITE
U MAROTS (ESA)
MARITIME SATELLITES
NT MAROTS (ESA)
Data relay packages for commercial ships and aircraft
[AIAA 77-1560] p0051 A78-13685
The MAROTS maritime satellite programme
p0227 A78-27049
Maritime satellite communications - Where we are and where we're going
[AAS 77-257] p0371 A78-36721
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
The use of Doppler-shift position lines in satellite navigation systems
p0590 A78-51890
MARKET RESEARCH
World commercial air transport market to 1991
p0003 A78-11799
The next engine decision - Why it takes so long --- for passenger airliners
p0058 A78-15090
Commercial air transport - The next ten years
p0058 A78-15091
Future development of commercial aircraft: Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
The division of air transport markets between carriers - Local service operations
p0284 A78-30697
Expansion potential for the local service air carrier
p0376 A78-37539
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
MARKETING
Giants battle in US small turbine market --- jet engines for small aircraft
p0274 A78-29174
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
MARKOV CHAINS
Probabilistic model of an instrument landing system
p0509 A78-47407
MARKOV PROCESSES
NT MARKOV CHAINS
MAROTS (ESA)
Access study and simulation of the Marots communication system
p0226 A78-27027
The MAROTS maritime satellite programme
p0227 A78-27049
Maritime satellite communications - Where we are and where we're going
[AAS 77-257] p0371 A78-36721
MARS ATMOSPHERE
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
MARS ENVIRONMENT
NT MARS ATMOSPHERE
MARTIN AIRCRAFT
NT B-57 AIRCRAFT
MASS FILTERS
U FLUID FILTERS
MASS FLOW
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
Numerical calculation of transonic flow past a swept wing by a finite volume method
[NASA-CR-157012] p0403 N78-24808
MASS TRANSFER
Film cooling of a gas turbine blade
p0573 A78-50580
MATERIAL REMOVAL (MACHINING)
U MACHINING
MATERIALS HANDLING
NT GROUND HANDLING
Saving raw materials or saving energy in aircraft construction
p0053 A78-14285
Minimum requirements for future wide-body aircraft cargo systems and compartments /intermodal/
[SAE ARP 1395] p0471 A78-44691
Gondola system for helicopter transport of external cargo
[AD-A047560] p0306 N78-20120
MATERIALS SCIENCE
Wear studies on aircraft brake materials
p0177 A78-23433
Materials and processes - In service performance; Proceedings of the Ninth National Technical Conference, Atlanta, Ga., October 4-6, 1977
p0217 A78-25176
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
MATERIALS TESTS
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
Nondestructive testing of adhesive bonded structure
p0480 A78-45937
MATHEMATICAL ANALYSIS
U APPLICATIONS OF MATHEMATICS

MATHEMATICAL LOGIC
NT ALGORITHMS
NT FORMULAS (MATHEMATICS)
NT LATTICES (MATHEMATICS)
Modifications and improvements in a structural optimization scheme based on an optimality criterion
[AD-A055941] p0609 N78-32088
MATHEMATICAL MODELS
NT ANALOG SIMULATION
NT DIGITAL SIMULATION
The influence of runway irregularities on the dynamic behavior of aircraft at takeoff
[ONERA, TP NO. 1977-147] p0003 A78-12034
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Mathematical planning and bulk service methods of civil aviation --- Russian book
p0015 A78-13000
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410
Aircraft display design using analytical pilot models
p0113 A78-18068
The interaction between the characteristics of the operational environment and the flight performance of second-generation STOL aircraft - Some preliminary results
p0121 A78-19073
Construction of a mathematical model of a jet engine for analyzing transient flows
p0167 A78-20971
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Multipath fading simulation model and full-scale results --- polarized electromagnetic signal transmission
p0221 A78-25879
Squeeze film damper characteristics for gas turbine engines
[ASME PAPER 77-DET-23] p0226 A78-26796
Tentative establishment of a mathematical model of a turbojet engine as a controlled system
p0229 A78-27567
A case for a new model for turbulent flame propagation
p0229 A78-27840
The aerodynamic behaviour of fully inflated parachutes
p0275 A78-29215
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
Geometric restitution of single coverage aircraft multispectral scanner data
p0280 A78-29854
Tandem-queue algorithm for airport user flows
p0284 A78-30677
Runway roughness characterization by DDS approach --- Dynamic Data System
p0284 A78-30679
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Probabilistic model of an instrument landing system
p0509 A78-47407
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
On the theory of drag calculation and profile optimization in shockless near free molecular flow
p0510 A78-47887
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
Modeling refinements for the rectified superconducting alternator --- airborne power supply
p0536 A78-49961
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752
Optimization of the structure of the LOT Polish Airlines fleet for the requirements of international passenger transport
p0588 A78-51598
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648
Engine non-containment: UK risk assessment methods
p0025 N78-10072
Development of fiber shields for engine containment --- mathematical models
p0026 N78-10079
Calculation of the compressible boundary layer around a profile
[AAAF-NT-77-08] p0034 N78-11019
A technique for simulating turbulence for aerospace vehicle flight simulation studies
[NASA-TM-78141] p0079 N78-12014
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TM-D-8449] p0081 N78-12037
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
The helicopter route selection model (DYNPLITE)
[AD-A045094] p0096 N78-13047
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft
[NASA-TM-73816] p0102 N78-13854
Systematic investigation of models of helicopter with a slung load
p0149 N78-15026
Research on the flutter of axial-turbomachine blading
[AD-A047086] p0194 N78-16021
Characterization of nonGaussian atmospheric turbulence for prediction of aircraft response statistics
[NASA-CR-2913] p0197 N78-16044
A critique of aircraft airframe cost models
[AD-A047181] p0198 N78-16048
Unsteady aerodynamic modeling and active aeroelastic control
p0199 N78-16061
A computational model for three-dimensional incompressible small cross flow wall jets
[AD-A048450] p0237 N78-18008
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
Benefit-cost evaluation of an intra-regional air service in the Bay area
[NASA-CR-152084] p0256 N78-19082

Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116
Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
A non-stationary model for atmospheric turbulence patches for the prediction of aircraft design loads
[NLR-TR-76131-U] p0361 N78-23085
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Replacement process analysis: An interim report on replacement models
[AD-A052411] p0399 N78-24150
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
A study of the lift-to-drag ratio capability of caret wing waveriders
[AD-A053691] p0498 N78-29069
Demand modelling of passenger air travel: An analysis and extension, volume 2
[NASA-CR-157402] p0545 N78-30069
Structural dynamics, stability, and control of helicopters
[NASA-CR-158909] p0552 N78-30139
Procedures for generation and reduction of linear models of a turbofan engine
[NASA-TP-1261] p0556 N78-30896
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101
Dynamic analysis of flexible rotor-bearing systems using a model approach
p0616 N78-32424
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692

MATHEMATICAL PROGRAMMING
NT DYNAMIC PROGRAMMING
NT LINEAR PROGRAMMING
NT NONLINEAR PROGRAMMING
NT QUADRATIC PROGRAMMING

MATRICES (CIRCUITS)
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062

MATRICES (MATHEMATICS)
NT CANONICAL FORMS
NT EIGENVALUES
NT EIGENVECTORS
NT STIFFNESS MATRIX
Organization of a programmed matrix-operation system in an airborne digital computer
p0192 A78-24585
Conservative implicit schemes for the full potential equation applied to transonic flows
[NASA-TM-78469] p0271 N78-19868
DYGABCD: A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110

MATRIX ANALYSIS
U MATRICES (MATHEMATICS)

MATRIX METHODS
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures --- aircraft structural analysis
p0127 A78-19656
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659

MATRIX STRESS CALCULATION
U MATRIX METHODS

MAXIMUM LIKELIHOOD ESTIMATES
Interferometer design for elevation angle estimation --- radar detection in ATC
p0001 A78-10304
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
New frequency domain methods for system identification
p0182 A78-23883
A simplified instrument failure detection scheme
p0481 A78-46377
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
Maximum likelihood identification of the longitudinal aerodynamic coefficients of the EA-6B airplane in the catapult launch configuration
[AD-A054243] p0557 N78-31046

MAXWELL EQUATION
THREDE - A free-field EMP coupling and scattering code --- electromagnetic scattering from aircraft
p0126 A78-19580

MCDONNELL AIRCRAFT
NT C-9 AIRCRAFT
NT DC 10 AIRCRAFT
NT F-4 AIRCRAFT
NT F-101 AIRCRAFT

MCDONNELL DOUGLAS AIRCRAFT
NT A-4 AIRCRAFT
NT C-9 AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
NT DOUGLAS AIRCRAFT
NT F-4 AIRCRAFT
NT F-18 AIRCRAFT
NT F-101 AIRCRAFT

MEAN TIME BETWEEN FAILURES
U MTBF

MEASURE AND INTEGRATION
NT NUMERICAL INTEGRATION
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182

MEASURE THEORY
U MEASURE AND INTEGRATION

MEASURING INSTRUMENTS
NT ACCELEROMETERS
NT ALTIMETERS
NT ANEMOMETERS
NT APPROACH INDICATORS
NT ATOMIC CLOCKS
NT ATTITUDE INDICATORS
NT BAROMETERS
NT BATHYMETERS
NT DISTANCE MEASURING EQUIPMENT
NT ELECTROSTATIC PROBES
NT ELLIPSOMETERS
NT ENGINE MONITORING INSTRUMENTS
NT FLIGHT LOAD RECORDERS
NT FLIGHT RECORDERS
NT FLIR DETECTORS
NT FLOWMETERS
NT FUEL GAGES
NT GYROCOMPASSES
NT HOT-FILM ANEMOMETERS
NT HOT-WIRE ANEMOMETERS

NT INDICATING INSTRUMENTS
NT INFRARED DETECTORS
NT INFRARED RADIOMETERS
NT INFRARED SPECTROMETERS
NT INTERFEROMETERS
NT ION PROBES
NT LASER ANEMOMETERS
NT LASER DOPPLER VELOCIMETERS
NT LASER RANGE FINDERS
NT MAGNETOMETERS
NT METEOROLOGICAL INSTRUMENTS
NT MICHELSON INTERFEROMETERS
NT MICROWAVE INTERFEROMETERS
NT MICROWAVE SENSORS
NT MULTISPECTRAL BAND SCANNERS
NT OMEGA NAVIGATION SYSTEM
NT OPTICAL MEASURING INSTRUMENTS
NT OPTICAL SCANNERS
NT OSCILLOGRAPHS
NT PNEUMATIC PROBES
NT POSITION INDICATORS
NT PROFILOMETERS
NT PYRANOMETERS
NT RADIATION MEASURING INSTRUMENTS
NT RADIO DIRECTION FINDERS
NT RADIOMETERS
NT RANGE FINDERS
NT SATELLITE-BORNE INSTRUMENTS
NT SPECTRORADIOMETERS
NT SPEED INDICATORS
NT STRAIN GAGES
NT TEMPERATURE PROBES
NT TURBULENCE METERS
NT WEATHER DATA RECORDERS
Instrumentation and control for a large engine test facility
p0107 A78-17584
MSP/ITWL airborne measuring system
p0231 A78-28196
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066
Measuring techniques in high temperature turbines
p0322 N78-21151
Air speed and attitude probe
[NASA-CASE-PRC-11009-1] p0408 N78-25088
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
MECHANICAL DEVICES
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
MECHANICAL DRIVES
NT HELICOPTER PROPELLER DRIVE
NT MAGNETIC TAPE TRANSPORTS
NT PROPELLER DRIVE
NT TRANSMISSIONS (MACHINE ELEMENTS)
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
A clutch for V/STOL
[SAE PAPER 770989] p0180 A78-23826
An assessment of some forms of follower-tooth reduction gear and its application to helicopter main rotor gearboxes
[RAE-TR-77040] p0150 N78-15035
HLH drive system
[AD-A054024] p0500 N78-29094
Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114
MECHANICAL ENGINEERING
Design, construction and testing of a sub-scale turbojet test cell
[AD-A043005] p0044 N78-11126
Rotor design implications for composite material properties
[UCRL-80117] p0553 N78-30182
MECHANICAL MEASUREMENT
NT DISPLACEMENT MEASUREMENT
NT DRAG MEASUREMENT
NT FLOW MEASUREMENT
NT FRICTION MEASUREMENT
NT PRESSURE MEASUREMENTS
NT STRESS MEASUREMENT
NT THRUST MEASUREMENT
NT VELOCITY MEASUREMENT
NT VIBRATION MEASUREMENT
NT WIND MEASUREMENT
NT WIND VELOCITY MEASUREMENT
MECHANICAL PROPERTIES
NT ABRASION RESISTANCE
NT AEROELASTICITY
NT AEROTHERMOELASTICITY
NT BRITTLENESS
NT COMPRESSIBILITY
NT CREEP PROPERTIES
NT CREEP RUPTURE STRENGTH
NT ELASTIC PROPERTIES
NT ELASTOPLASTICITY
NT FATIGUE LIFE
NT FIBER STRENGTH
NT FRACTURE STRENGTH
NT HIGH STRENGTH
NT MODULUS OF ELASTICITY
NT SHELL STABILITY
NT STIFFNESS
NT STRESS CYCLES
NT STRESS RELAXATION
NT STRUCTURAL STABILITY
NT TENSILE STRENGTH
NT THERMAL RESISTANCE
NT VISCOELASTICITY
NT WELD STRENGTH
NT YIELD STRENGTH
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
Boron-aluminum composite materials
p0130 A78-20146
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
Titanium and titanium alloys in aircraft maintenance and repair. I
p0378 A78-38246
Problems of the theory of strength related to aircraft construction and civil engineering; Structural Mechanics Meeting, Ottobrunn, West Germany, June 1, 2, 1977, Lectures and Discussion Contributions
p0382 A78-38802
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
Medium and high resistance steels
[AAAF-NT-77-36] p0355 N78-22223
MECHANICAL RESONANCE
U RESONANT VIBRATION
MECHANIZATION
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
MEETINGS
U CONFERENCES
MELTING
Effect of temperature-dependent heat capacity on aerodynamic ablation of melting bodies
p0571 A78-50455
MEMBRANE ANALOGY
U STRUCTURAL ANALYSIS
MEMBRANE STRUCTURES
NT SKIN (STRUCTURAL MEMBER)
MEMBRANE THEORY
U STRUCTURAL ANALYSIS
MEMBRANES
NT SKIN (STRUCTURAL MEMBER)
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
MERIDIONAL FLOW
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
MEROMORPHIC FUNCTIONS
Construction of airfoil profiles approximating a given profile
p0485 A78-46588
MESOMETEOROLOGY
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave

p0188 A78-24356
Environmental aerodynamics --- Book
p0332 A78-33802
MESOSPHERE
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
METAL BONDING
NT METAL-METAL BONDING
Fatigue research on bonded carbon fibre composite/metal joints --- examination of aircraft structural materials
p0002 A78-11400
Transport construction costs studied --- composite materials use in aircraft for cost reduction
p0078 A78-17129
Diffusion brazing titanium sandwich structures
p0587 A78-51524
Process and metallurgical factors in joining superalloys and other high service temperature materials
p0046 N78-11393
Spacelab: Testing of Metalbond 328 WC and foam adhesive BSL 208/5
[FOK-R-2162] p0442 N78-26221
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints --- in aircraft structures
[DLR-FB-77-63] p0567 N78-31251
METAL COATINGS
Coatings for fretting prevention
p0178 A78-23441
Problem-solving with selective plating --- for aircraft metal coating repair
p0383 A78-38900
Extending the service life of aircraft components made of high-strength steels --- Russian book
p0522 A78-48518
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
METAL CORROSION
U CORROSION
METAL FATIGUE
Determination of the constants of the diffusion theory of fatigue fracture
p0132 A78-20289
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
The strength of structures and the applications of the fracture mechanics
p0178 A78-23574
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
Fatigue crack growth of titanium fan blades
p0589 A78-51744
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3798] p0143 N78-14158
The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454
Titanium damage tolerant design data for propulsion systems --- gas turbine engine components
[AD-A053252] p0442 N78-26202
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminium alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions --- airframe fatigue cracking
[AD-A055483] p0617 N78-32504
METAL FIBERS
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
METAL FORGING
U FORGING
METAL FORMING
U FORMING TECHNIQUES
U METAL WORKING
METAL HYDRIDES
NT ALUMINUM BOROHYDRIDES
METAL JOINTS
NT WELDED JOINTS
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
Fatigue strength of joints with special fasteners, part 2
[RAE-LIB-TRANS-1920] p0145 N78-14408
METAL MATRIX COMPOSITES
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
The prospects for composites based on boron fibers
[NASA-TM-75305] p0457 N78-27185
METAL OXIDE SEMICONDUCTORS
NT CMOS
METAL OXIDES
NT PLUTONIUM OXIDES
NT ZIRCONIUM OXIDES
METAL PARTICLES
NT METAL POWDER
METAL POWDER
Suspension fuels. One type of hopeful high energy fuel
[AD-A045908] p0153 N78-15294
METAL SHEETS
A close look at 7475 and 2024 aluminum for aircraft structures
p0108 A78-17699
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513
Effect of aircraft loading program modifications on the fatigue life and damage cumulation. Part 1: Effect of load peaks in case of central hole sheet specimens
[TAE-334-PT-1] p0616 N78-32462
METAL SHELLS
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
METAL SURFACES
Erosion resistant coatings --- for aircraft parts
p0120 A78-19056
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436
Measurement of momentum transport to surfaces of different form in a hypersonic free-molecular stream
p0335 A78-34448
Some effects of temperature on the erosion of metals
p0588 A78-51594
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines

[NASA-TM-73818] p0151 N78-15044
METAL WORKING
NT FORGING
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
Titanium and titanium alloys for the maintenance and repair of aircraft. II
p0469 A78-44200
METAL-METAL BONDING
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
Non-welding joining, cutting and thermal spraying methods
p0046 N78-11395
METALLOGRAPHY
Materials and processes - In service performance; Proceedings of the Ninth National Technical Conference, Atlanta, Ga., October 4-6, 1977
p0217 A78-25176
Metallurgical behavior of arresting gear deck pendants
p0218 A78-25185
METALLOIDS
NT BORON
METALLURGY
Materials and manufacturing processes for increased life/reliability --- of turbine wheels
p0027 N78-10086
METALS
NT ALUMINUM
NT BERYLLIUM
NT CHROMIUM
NT METAL COATINGS
NT METAL MATRIX COMPOSITES
NT METAL POWDER
NT RARE EARTH ELEMENTS
NT TANTALUM
NT TITANIUM
NT TRANSITION METALS
NT ZIRCONIUM 95
Metals in flight /2nd enlarged and revised edition/ --- aircraft and spacecraft construction materials
p0415 A78-40375
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
METEORITE COMPRESSION TESTS
U COMPRESSION TESTS
U MECHANICAL PROPERTIES
METEOROLOGICAL BALLOONS
The use of long-duration balloons for scientific research
p0113 A78-18184
METEOROLOGICAL FLIGHT
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189
METEOROLOGICAL INSTRUMENTS
NT BAROMETERS
NT WEATHER DATA RECORDERS
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
Use of NS LX1600A as a short-range altimeter
p0273 A78-28880
METEOROLOGICAL PARAMETERS
Satellite images to aircraft in flight --- GEOS image transmission feasibility analysis
p0056 A78-14982
Prediction of the ascending speeds of gliders in thermal convection over a plain
p0177 A78-23398
Feasibility of landing at an alternate airport due to visibility conditions
p0585 A78-51341
Overview of safety research
p0497 N78-29054
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
METEOROLOGICAL RADAR
Color displays for airborne weather radar
p0372 A78-36980
METEOROLOGICAL ROCKETS
U SOUNDING ROCKETS
METEOROLOGICAL SATELLITES
Data relay packages for commercial ships and aircraft
[AIAA 77-1560] p0051 A78-13685
Automated meteorological data from commercial aircraft via satellite: Present experience and future implications
[NASA-TM-73750] p0212 N78-17558
METEOROLOGICAL SERVICES
Aviation weather service requirements, 1980 - 1990
p0267 N78-19713
An overview of aviation weather services
p0267 N78-19715
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718
METEOROLOGY
NT AEROLOGY
NT MESOMETEOROLOGY
NT TROPICAL METEOROLOGY
NT WEATHER FORECASTING
Lightning strike experience
p0035 N78-11027
METERS
U MEASURING INSTRUMENTS
METHANE
Current and future fuels for transport aircraft
p0116 A78-18669
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897
METHOD OF CHARACTERISTICS
Small perturbation theory for supersonic jets
[AIAA PAPER 78-1151] p0421 A78-41851
METRIC SYSTEM
U INTERNATIONAL SYSTEM OF UNITS
MICHELSON INTERFEROMETERS
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
MICROCIRCUITS
U MICROELECTRONICS
MICROELECTRONICS
NT LARGE SCALE INTEGRATION
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
MICROMINIATURIZATION
NT LARGE SCALE INTEGRATION
MICROMINIATURIZED ELECTRONIC DEVICES
The AN/APX-100/V/ transponder --- for military aircraft
p0537 A78-49971
MICROPHONES
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
MICROPROCESSORS
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
Microprocessor controlled testing of Air Data Computers
p0065 A78-15649
Microprocessor realization of the bus interface unit for a distributed avionic computer system
p0066 A78-15661
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
Multiprocessing for electronic warfare avionics
p0532 A78-49869

Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
The evolution of a remotely piloted vehicle microprocessor flight control system
[AIAA 78-1273] p0541 A78-50183
Research and development of digital jet-engine controls
p0578 A78-50626
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
Stand-alone development system using a KIM-1 microcomputer module
[NASA-CR-156067] p0303 N78-20100
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311

MICROSCOPY
NT ELECTRON MICROSCOPY

MICROSTRIP TRANSMISSION LINES
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391

MICROSTRUCTURE
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
Correlation of microstructure with fracture toughness properties in metals, part 3 --- titanium alloys
[AD-A043741] p0045 N78-11238

MICROWAVE ANTENNAS
Optimal aperture-shape for an antenna array --- for radio navigation of flight vehicles
p0228 A78-27406
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
The optimum shape of the aperture of an antenna array --- for radio navigation of aircraft
p0598 A78-53257
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391

MICROWAVE ATTENUATION
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles --- of ground-to-aircraft wideband data links
p0592 A78-52360

MICROWAVE EQUIPMENT
NT MICROWAVE ANTENNAS
NT MICROWAVE INTERFEROMETERS
NT MICROWAVE OSCILLATORS
NT MICROWAVE SCANNING BEAM LANDING SYSTEM
NT TRAVELING WAVE TUBES
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096

MICROWAVE FREQUENCIES
NT C BAND
NT EXTREMELY HIGH FREQUENCIES
NT SUPERHIGH FREQUENCIES

MICROWAVE INTERFEROMETERS
Interferometer design for elevation angle estimation --- radar detection in ATC
p0001 A78-10304

MICROWAVE LANDING SYSTEMS
NT MICROWAVE SCANNING BEAM LANDING SYSTEM
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
The Interim Standard Microwave Landing System
p0112 A78-17915
The victory of the frequency-reference beam over the Doppler MLS at AWOP 6 --- MLS for all-weather conditions
p0115 A78-18664
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
The possibility of installing a Microwave Landing System at the Palermo/Punta Raisi airport
p0119 A78-19042
In search of a better approach concept - MLS and HUD --- Head-Up Display/Microwave Landing System
p0134 A78-20479
Navigation procedure - Present systems and development trends
[DGLR PAPER 77-018] p0189 A78-24411
The technical potential of instrument landing systems in the present and in the future
[DGLR PAPER 77-019] p0189 A78-24412
Precision DME for new landing system - Fast or slow pulse
p0225 A78-26549
Microwave landing systems --- time reference scanning beam used to determine aircraft approach
p0275 A78-29221
Doppler MLS - The UK solution
p0280 A78-29934
Whither MLS --- Microwave Landing System civil and military applications
p0281 A78-30096
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
Use of the U.S. interim standard microwave landing system in Canada
p0523 A78-49333
Landing aircraft under poor conditions
p0525 A78-49549
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
Microwave landing system utilization and conventional avionics
[AD-A044297] p0083 N78-12055
Airborne antenna coverage requirements for the TCV B-737 aircraft --- for operation with microwave landing systems
[NASA-TM-78647] p0153 N78-15325
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
Interference analysis between TRSB microwave landing system and adjacent C-band radars
[AD-A049882] p0304 N78-20101
Accuracy considerations on new Microwave Landing Systems (MLS) from an operational point of view
p0315 N78-21081
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0433 N78-26066
The effect of landing system coverage and path geometry on lateral position errors at the runway threshold
[NASA-TM-78744] p0451 N78-27100
TRSB microwave landing system demonstration program at Cape May, New Jersey, USA
[AD-A054605] p0488 N78-28070
TRSB microwave landing system demonstration program at Dakar, Senegal
[AD-A054645] p0489 N78-28073
TRSB microwave landing system demonstration program at Nairobi, Kenya
[AD-A054646] p0489 N78-28074
TRSB microwave landing system demonstration program at Brussels, Belgium
[AD-A054298] p0546 N78-30075
TRSB microwave landing system demonstration program at John F. Kennedy International Airport, Long Island, New York, USA
[AD-A055447] p0559 N78-31070
TRSB microwave landing system demonstration program at Kristiansand, Norway
[AD-A055317] p0559 N78-31071
TRSB microwave landing system demonstration program at Charleroi, Belgium

[AD-A055920] p0559 N78-31072
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
MICROWAVE OSCILLATORS
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
MICROWAVE SCANNING BEAM LANDING SYSTEM
Get acquainted with scanning-beam MLS --- reviewing capabilities and parameters
p0416 A78-40844
Microwave scanning beam landing system, ground station: Performance test report. Volume 1: Executive summary
[NASA-CR-151582] p0139 N78-14021
TRSB microwave landing system demonstration program at Cape May, New Jersey, USA
[AD-A054605] p0488 N78-28070
TRSB microwave landing system demonstration program at Buenos Aires, Argentina
[AD-A054451] p0489 N78-28071
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
TRSB microwave landing system demonstration program at Shiraz, Iran
[AD-A055526] p0625 N78-33071
MICROWAVE SENSORS
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897
MICROWAVE TRANSMISSION
SHF/EHF satellite communication terminal --- onboard C-135 aircraft
[AIAA 78-581] p0328 A78-32921
Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439
MICROWAVE TUBES
NT MICROWAVE OSCILLATORS
NT TRAVELING WAVE TUBES
MICROWAVES
NT CENTIMETER WAVES
NT MILLIMETER WAVES
MIDAIR COLLISIONS
NT BIRD-AIRCRAFT COLLISIONS
The collision risk
p0175 A78-22851
Electronic aircraft collision avoidance system --- Russian book
p0376 A78-37603
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
Preventing helicopter mid-air collisions with the proximity warning device
p0585 A78-51223
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
Annual review of aircraft accident data, US general aviation, calendar year 1976
[PB-281330/1] p0624 N78-33064
MIDCOURSE GUIDANCE
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
MILITARY AIR FACILITIES
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces --- aging of airframe materials
[AD-A045277] p0096 N78-13049
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
The problem of technology transfer: Real or imagined
[AD-A042961] p0213 N78-17943
Area navigation systems and procedures
p0316 N78-21091
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas --- ground based control
[AD-A053938] p0452 N78-27106
APAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
MILITARY AIRCRAFT
NT E-3A AIRCRAFT
NT E-4A AIRCRAFT
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
Facing up to the military V/STOL challenge
p0016 A78-13070
Toward a new V/STOL generation
p0016 A78-13071
Improved operational maintenance forcasting techniques
p0052 A78-13848
Life cycle testing for avionics development
p0060 A78-15557
Aircraft avionics cooling, present and future
p0060 A78-15558
Advanced environmental control for avionic systems
p0060 A78-15559
Airborne defensive fire control algorithms
p0063 A78-15627
Fiber optic data buses for avionics - A systems view
p0066 A78-15656
A flexible approach to on-board computer simulation
p0068 A78-15706
Navy to seek design proposals for new V/STOLS
p0069 A78-15876
Advanced Harrier pushed for fleet use
p0069 A78-15877
Tomorrow's tanker --- air-air refueling aircraft
p0077 A78-17099
V/STOL presentation --- for future Navy applications
p0109 A78-17880
Weight and cost in the design arena --- in aircraft development
p0109 A78-17884
Application of the thrust augmentation wing principle for potential military use
p0110 A78-17893
Engineering methods in engine management
p0112 A78-18021
Research needs for U.S. Army aircraft propulsion
[AIAA PAPER 78-45] p0171 A78-22558
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
The Dual-Flight-Simulator as an aid for a government mission specialist
[DGLR PAPER 77-079] p0290 A78-31949
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
Early warning aircraft
p0342 A78-35898
Modern RF system design for aircraft --- tactical information exchange system
p0373 A78-37341
Coatings for aircraft which operate in marine environments
p0468 A78-44113
The ZTL/KEL program in the preliminary phase of future military projects
p0470 A78-44618
AIDS in military aircraft --- Airborne Integrated Data Systems Computer
p0510 A78-47866
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
The AN/APX-100/V/ transponder --- for military aircraft
p0537 A78-49971

Military transport (C-141) fly-by-wire program
[AD-A046163] p0143 N78-14056
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs
[AD-A046824] p0153 N78-15287
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 30 June 1977
[AD-A047857] p0207 N78-17045
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125
Navigation, guidance and control for high performance military aircraft
p0316 N78-21090
Advanced technology servicing equipment for army aircraft
[AD-A052652] p0400 N78-24158
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133
Unfulfilled needs of non-destructive inspection of military aircraft
p0443 N78-26464
Combat damage tolerance and repair of aircraft structures
[AGARD-R-667] p0491 N78-28088
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091
Technical evaluation of flying weapon systems
[RAE-LIB-TRANS-1948] p0560 N78-31087

MILITARY AVIATION
A new concept in integrated reference systems --- avionics cost reduction
[AIAA 77-1497] p0006 A78-12245
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
Proposed load evaluation system for U.S. Air Force --- of airfield pavement
p0526 A78-49677
MIL-STD-1553B proposed --- data bus development in avionic architecture
p0531 A78-49866
Applications for airborne digital communications
p0590 A78-51896
Projected needs of US Army Aviation
p0261 N78-19127
Army aviation RDT and E plan, sixth edition
[AD-A049214] p0271 N78-20010
Army research and technology laboratories, FY 1977
[AD-A049212] p0271 N78-20011
Army aviation RDT and E plan. Sixth edition: Executive summary
[AD-A049213] p0271 N78-20012
Status of the Air Force's F-16 aircraft program
[PB-280304/7] p0567 N78-31946
Physical characteristics: Aviation materiel --- Army test facilities and equipment
[AD-A055803] p0610 N78-32093

MILITARY HELICOPTERS
NT AH-64 HELICOPTER
NT CH-47 HELICOPTER
NT CH-62 HELICOPTER
NT H-53 HELICOPTER
NT HEAVY LIFT HELICOPTERS
NT OH-6 HELICOPTER
NT OH-58 HELICOPTER
NT UH-1 HELICOPTER
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
Design and fabrication of an improved performance, low cost, composite main rotor blade for the Cobra helicopter
p0077 A78-16906
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
The helicopter route selection model (DYNFLITE)
[AD-A045094] p0096 N78-13047
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
German Army helicopter development and prospects for the future
p0261 N78-19128
Canadian Navy experience with small ship helicopter operations
p0261 N78-19129
British Military helicopter programmes
p0262 N78-19130
The US Army UTTAS and AAH programs
p0262 N78-19131
US Navy/Marine Corps rotary wing requirements
p0262 N78-19132
Evaluation of the tilt rotor concept· The XV-15's role
p0263 N78-19142
Technical and financial fall-out on armed forces from commercial and export helicopter programmes
p0264 N78-19150
Civil and military design requirements and their influence on the product
p0264 N78-19151
Hydraulic constant recoil program
[AD-A049313] p0267 N78-19517
The Soviet attack helicopter
[AD-A050649] p0349 N78-22080
A study of the desirability and feasibility of in-flight escape from Army helicopters
[AD-A051153] p0359 N78-23071
Evaluation of a pressurized air start system for advanced army helicopters --- gas turbine engines
[AD-A051967] p0360 N78-23082
Can the Army's $2.8 billion program modernize the CH-47 helicopter be improved
[PB-277397/6] p0440 N78-26139
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
Physical characteristics: Aviation materiel --- Army test facilities and equipment
[AD-A055803] p0610 N78-32093
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109
Noise requirements from a military point of view
p0619 N78-32819

MILITARY OPERATIONS
NT COMBAT
Simulation tests of anti-flak profiles --- aircraft flight optimization for ground attack mission
p0290 A78-31951
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051
Combined military and commercial application of light helicopters
p0262 N78-19136
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
The Soviet attack helicopter
[AD-A050649] p0349 N78-22080
Status of the Navy's vertical short takeoff and landing aircraft
[PB-277401/6] p0440 N78-26140
The military utility of very large airplanes and alternative fuels
[AD-A053604] p0487 N78-28051
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088

MILITARY TECHNOLOGY
Small ballooning serves the Navy
p0004 A78-12174
Digital multimode fly-by-wire flight control system design and simulation evaluation

[AIAA 77-1508] p0007 A78-12254
JTIDS - An update --- Joint Tactical Information Distribution System
[AIAA 77-1521] p0008 A78-12262
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
The pilot's laser --- gas laser rangefinders for aircraft weapons delivery
p0059 A78-15375
B-1 terrain following
p0125 A78-19447
The digital airplane --- military avionics
p0126 A78-19547
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
Testing a modern strike aircraft navigation system
p0175 A78-22852
Army UTTAS program --- UH-60A helicopter for Utility Tactical Transport Aircraft System
[SAE PAPER 770952] p0179 A78-23803
The impact of emerging technologies on tactical V/STOL airplane design and utility
[SAE PAPER 770985] p0180 A78-23824
Variable speed constant frequency /VSCF/ aircraft electrical power
[SAE PAPER 771002] p0181 A78-23836
Airborne electronic warfare in the modern military force
[AIAA PAPER 78-324] p0185 A78-24018
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040
Whither MLS --- Microwave Landing System civil and military applications
p0281 A78-30096
Landing systems - The Navy viewpoint
p0281 A78-30097
Fire power --- fighter aircraft target acquisition and tracking radar
p0288 A78-31425
The next generation EW system - ASPJ --- Airborne Self Protection Jammer
p0288 A78-31700
ASPJ - Partners at last --- Airborne Self Protection Jammers
p0336 A78-34676
The Navstar Global Positioning System /GPS/
p0594 A78-52952
Cost-effectiveness of flight simulators for military training. Volume 1: Use and effectiveness of flight simulators
[AD-A052801] p0400 N78-24156
Carbon fiber study
[NASA-TM-79449] p0401 N78-24292
TRIP steels promise high reliability hardware
[AD-A052765] p0401 N78-24348
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911
MILLIMETER WAVES
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
MINERALS
NT GRAPHITE
NT WURTZITE
MINICOMPUTERS
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer --- Joint Tactical Information Distribution System for TDMA digital communication and navigation
[AIAA 77-1415] p0014 A78-12677
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
Development of an on-board minicomputer system
p0124 A78-19435
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
Simulation testing via mini computer --- of inertial navigation systems
p0428 A78-43057
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
The direct access radar channel - A distributed minicomputer system
p0596 A78-52976
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
Modifications to FALSTAFF that were required for operation on a 16 K PDP-8e minicomputer
[LTR-ST-899] p0202 N78-16392
MINIMA
A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081
MINIMIZATION
U OPTIMIZATION
MINIMUM DRAG
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
Optimum tail plane design for artificially stabilized aircraft
p0276 A78-29334
Minimum induced drag configurations with jet interaction
[NASA-CR-145344] p0204 N78-17002
MIRRORS
NT ROTATING MIRRORS
MISSILE BODIES
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
High angle canard missile test in the Ames 11-foot transonic wind tunnel
[NASA-CR-2993] p0405 N78-25057
A distributed vortex method for computing the vortex field of a missile
[NASA-TP-1183] p0405 N78-25058
MISSILE CASES
U MISSILE BODIES
MISSILE COMPONENTS
NT MISSILE BODIES
MISSILE CONFIGURATIONS
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control --- in the Langley Unitary Plan Wind Tunnel
[NASA-TP-1124] p0301 N78-20079
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055
Nonlinear rolling motion analysis of a Canard-controlled missile configuration at angles of attack from 0 to 30 degrees in incompressible flow
[AD-A056695] p0631 N78-33132
MISSILE CONSTRUCTION
U MISSILE STRUCTURES
MISSILE CONTROL
Solid-state active RF missile seeker - Future role in all-weather systems

p0054 A78-14935
A comparison of three computerized design algorithms for control systems --- for missle and aircraft autopilots
p0107 A78-17527
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
Bank-to-turn /BIT/ autopilot technology --- for missiles
p0534 A78-49927
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched missiles
p0534 A78-49929
Modular target acquisition and designation systems
p0536 A78-49954

MISSILE DEFENSE
Key beam weapons tests slated --- for aircraft carrier particle beam defense against cruise missiles
p0597 A78-53238

MISSILE DESIGN
Optimization of the design parameters of finned pilotless flight vehicles
p0293 A78-32269
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis --- NASTRAN
[AD-A048840] p0254 N78-19065

MISSILE DETECTION
NT RADAR DETECTION

MISSILE GUIDANCE
U MISSILE CONTROL

MISSILE LAUNCHERS
Braiding composites - Adapting the process for the mass production of aerospace components
p0077 A78-16904
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876

MISSILE STABILIZATION
U MISSILE CONTROL

MISSILE STRUCTURES
External interaction of the nuclear EMP with aircraft and missiles
p0169 A78-21989
Flutter of control surfaces with structural nonlinearities --- missile control surfaces
[AD-A045221] p0099 N78-13073

MISSILE SYSTEMS
Technical evaluation of flying weapon systems
[RAE-LIB-TRANS-1948] p0560 N78-31087
Encyclopedia of US Air Force aircraft and missile systems. Volume 1: Post-World War II fighters 1945 - 1973
[AD-A057002] p0622 N78-33036

MISSILE TESTS
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
Performance methods for aircraft and missiles
p0434 N78-26075

MISSILES
NT AIR TO AIR MISSILES
NT AIR TO SURFACE MISSILES
NT ANTITANK MISSILES
NT CRUISE MISSILES
NT RADAR HOMING MISSILES
NT SPARROW 3 MISSILE
EMP induced currents on a simplified missile theory and experiment
p0385 A78-39109
Development of techniques and correlation of results to accurately establish the lift/drag characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
A method for validating missile system simulation models
[AD-A055689] p0613 N78-32169

MISSION PLANNING
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125
Doctrine versus capabilities: A project manager's dilemma with the CH-47 helicopter
[AD-A052376] p0413 N78-25970
Technical data requirements for shipboard and shorebased vertical/short takeoff and landing V/STOL aircraft
[AD-A054102] p0500 N78-29093

MIST
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080

MIXED FLOW
U MULTIPHASE FLOW

MIXERS
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067

MIXING
NT TURBULENT MIXING
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009

MIXTURES
NT AEROSOLS
NT EUTECTIC ALLOYS
NT EUTECTICS
NT FOG
NT GAS MIXTURES
NT LIQUID-GAS MIXTURES
NT METAL MATRIX COMPOSITES
NT SMOKE
NT SOLID SOLUTIONS

MMS
U MULTIMISSION MODULAR SPACECRAFT

MODAL RESPONSE
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592

MODE (STATISTICS)
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external stores
[DLR-PB-77-21] p0238 N78-18014
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064

MODE OF VIBRATION
U VIBRATION MODE

MODE SHAPES
U MODAL RESPONSE

MODELS
NT AIRCRAFT MODELS
NT ANALOG SIMULATION
NT ATMOSPHERIC MODELS
NT BREADBOARD MODELS
NT DIGITAL SIMULATION
NT DYNAMIC MODELS
NT ENVIRONMENT MODELS
NT MATHEMATICAL MODELS
NT SCALE MODELS
NT SEMISPAN MODELS
NT WIND TUNNEL MODELS
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979

MODEMS
A comparative evaluation of modem techniques for simultaneous data and range measurement --- aircraft position location and data communication via satellite
[AIAA 77-1474] p0005 A78-12231
A modulation/encoding scheme for use in a fading environment
p0069 A78-15718
SHF/EHF satellite communication terminal --- onboard C-135 aircraft
[AIAA 78-581] p0328 A78-32921

MODES
NT COUPLED MODES
NT FAILURE MODES
NT PROPAGATION MODES

NT VIBRATION MODE
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
MODIFICATION
U REVISIONS
MODULATION
NT PHASE SHIFT KEYING
NT PULSE FREQUENCY MODULATION
NT PULSE MODULATION
MODULATORS
NT MODEMS
MODULATORS-DEMODULATORS
U MODEMS
MODULES
NT ELECTRONIC MODULES
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
MODULUS OF ELASTICITY
Experience in using high-modulus carbon fibre --- in Viggen wing panels
p0077 A78-16896
MOHR CIRCLES
U FRACTURE MECHANICS
MOISTURE CONTENT
Material evaluation of polyurethane foam, 0.05 g/cm 3 density
[BDX-613-1836-REV] p0567 N78-31249
MOLDS
Large electroformed nickel moulds for aircraft parts
p0508 A78-47267
MOLECULAR ELECTRONICS
NT LARGE SCALE INTEGRATION
MOLECULAR FLOW
NT SLIP FLOW
NT TRANSITION FLOW
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
The fluid dynamics of rarefied molecular flow over convex bodies - A new theory and applications
p0229 A78-27588
MOLECULAR GASES
NT DIATOMIC GASES
MOLECULAR SPECTRA
NT VIBRATIONAL SPECTRA
MOMENT DISTRIBUTION
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
MOMENTS
NT BENDING MOMENTS
NT MOMENTS OF INERTIA
NT PITCHING MOMENTS
NT ROLLING MOMENTS
NT STABILITY DERIVATIVES
NT TORQUE
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
MOMENTS OF INERTIA
Effect of a nonconstant C/m-alpha/ on the stability of rolling aircraft
p0071 A78-16180
MOMENTUM TRANSFER
Measurement of momentum transport to surfaces of different form in a hypersonic free-molecular stream
p0335 A78-34448
Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and comparison with other data
[NASA-TM-72855] p0405 N78-25055
MONITORS
NT INFRARED RADIOMETERS
CRT update --- for airborne displays
p0374 A78-37490
The evaluation of a digital hardware voter/monitor in an aircraft control system
[AD-A043979] p0043 N78-11117
Effectiveness of the real time ferrograph and other oil monitors as related to oil filtration
[AD-A049334] p0308 N78-20134
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109
MONOCOQUE STRUCTURES
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670
MONOLITHIC CIRCUITS
U INTEGRATED CIRCUITS
MONOPLANES
NT A-4 AIRCRAFT
NT A-6 AIRCRAFT
NT A-7 AIRCRAFT
NT A-37 AIRCRAFT
NT AN-24 AIRCRAFT
NT B-52 AIRCRAFT
NT B-57 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT C-130 AIRCRAFT
NT C-135 AIRCRAFT
NT C-140 AIRCRAFT
NT C-141 AIRCRAFT
NT CANBERRA AIRCRAFT
NT CV-340 AIRCRAFT
NT DC 8 AIRCRAFT
NT DO-28 AIRCRAFT
NT F-5 AIRCRAFT
NT F-8 AIRCRAFT
NT F-17 AIRCRAFT
NT F-27 AIRCRAFT
NT F-28 TRANSPORT AIRCRAFT
NT F-100 AIRCRAFT
NT F-102 AIRCRAFT
NT F-106 AIRCRAFT
NT HFB-320 AIRCRAFT
NT HP-115 AIRCRAFT
NT IL-62 AIRCRAFT
NT P-3 AIRCRAFT
NT P-1127 AIRCRAFT
NT T-37 AIRCRAFT
NT U-2 AIRCRAFT
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
MONOPOLE ANTENNAS
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39405
Analysis of monopole antenna arrays on cylinders by the geometrical theory of diffraction
[AD-A055197] p0567 N78-31335
MONOPULSE ANTENNAS
Development of a discrete address beacon system --- testing monopulse beacon antennas
[AD-A048247] p0206 N78-17036
MONOPULSE RADAR
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
Combinatorially derived limits on the surface return for an air/surface monopulse ranging radar
p0539 A78-50001
MONTANA
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
MONTE CARLO METHOD
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
Calculating VOR/DME holding procedures --- for aircraft approach
p0114 A78-18503
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
User delay cost model for a terminal control area
p0427 A78-43039
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042

The ground-attack/penetration model: A Monte Carlo simulation model to assess the survivability and to evaluate tactics for low-altitude military missions in an environment of groundbased air defence systems
p0431 N78-26051
MOPS (PROPULSION SYSTEMS)
U MAN OPERATED PROPULSION SYSTEMS
MOTION AFTEREFFECTS
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
MOTION EQUATIONS
U EQUATIONS OF MOTION
MOTION PERCEPTION
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
MOTION SIMULATORS
Current problems of flight simulators for research
p0275 A78-29214
The generation of motion cues on a six-degrees-of-freedom motion system --- computer program
[VTH-LR-248] p0143 N78-14062
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
Quasi-optimal control of a moving-base simulator
p0357 N78-23021
MOTION STABILITY
NT AERODYNAMIC STABILITY
NT AIRCRAFT STABILITY
NT ATTITUDE STABILITY
NT BOUNDARY LAYER STABILITY
NT DIRECTIONAL STABILITY
NT FLAME STABILITY
NT FLOW STABILITY
NT HOVERING STABILITY
NT LATERAL STABILITY
NT LONGITUDINAL STABILITY
NT LOW SPEED STABILITY
NT MAGNETOHYDRODYNAMIC STABILITY
NT ROTARY STABILITY
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
MOTOR VEHICLES
NT AUTOMOBILES
NT TRUCKS
Development of the experimental gas turbine bus
p0575 A78-50601
Advantages of 3-shaft KTT gas turbine configurations for automotive applications
p0575 A78-50602
MOTORS
NT ASYNCHRONOUS MOTORS
NT ELECTRIC MOTORS
NT INDUCTION MOTORS
NT SERVOMOTORS
NT SYNCHRONOUS MOTORS
MOUNTING
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
Civil components program "Wing Section'. Preliminary design of engine mounting --- and nacelle mounting
[BMFT-FB-W-77-28] p0350 N78-22086
MOUNTS
U SUPPORTS
MOVING TARGET INDICATORS
Moving target analysis utilizing side-looking airborne radar
p0105 A78-17196
Evaluation of airborne radar Doppler processors
p0374 A78-37477
Moving target detector /MTD/ radar system
p0595 A78-52963
MRCA AIRCRAFT
Tornado vital for NATO's changing requirements
p0059 A78-15383
Jaguar and Tornado avionic development testing
p0380 A78-38748
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
Material selection for the Tornado taileron
p0383 A78-38811
EMC control of the tornado aircraft
p0384 A78-39087
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
Tornado development simulation --- computerized aircraft design
p0417 A78-41025
Avionics and the MRCA
p0141 N78-14046
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060
MSBLS
U MICROWAVE SCANNING BEAM LANDING SYSTEM
MTBF
Reliability of inertial navigation systems --- for military and commercial aircraft
p0537 A78-49968
MTI RADAR
U MOVING TARGET INDICATORS
MUFFLERS
Acoustical properties of materials and muffler configurations for the 80 by 120 foot wind tunnel
[NASA-CR-152065] p0030 N78-10116
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053
MULTI-ROLE COMBAT AIRCRAFT
U MRCA AIRCRAFT
MULTIENGINE VEHICLES
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063
MULTILAYER STRUCTURES
U LAMINATES
MULTILOOP SYSTEMS
U CASCADE CONTROL
MULTIMISSION MODULAR SPACECRAFT
Spacelab hardware update
[AAS PAPER 78-005] p0599 A78-53614
MULTIPATH TRANSMISSION
Multipath fading simulation model and full-scale results --- polarized electromagnetic signal transmission
p0221 A78-25879
Multipath limitations on low-angle radar tracking
p0222 A78-26157
Multistatic-radar binomial detection
p0222 A78-26158
Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439
L-band air-to-air multipath measurements --- for airborne collision avoidance systems
[AD-A045941] p0144 N78-14212
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
MULTIPHASE FLOW
NT TWO PHASE FLOW
Low frequency augmentor instability study --- afterburning effects in turbofan engines
[AIAA PAPER 78-996] p0464 A78-43543
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
MULTIPLETS
U FINE STRUCTURE
MULTIPLEX TRANSMISSION
U MULTIPLEXING
MULTIPLEXERS
U MULTIPLEXING

MULTIPLEXING
NT FREQUENCY DIVISION MULTIPLEXING
An airplane fiber optic multiplex data bus design and feasibility demonstration system
[AIAA 77-1475] p0005 A78-12232
RPV video digital multiplexing system
p0063 A78-15613
Compatibility testing and integration of DAIS multiplex bus equipments --- Digital Avionics Information System
p0064 A78-15638
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
The extension of GPMS architecture for the distribution of audio signals within Navy aircraft
[AD-A044739] p0090 N78-12299
B-1 EMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092
MULTIPROCESSING (COMPUTERS)
Multiprocessing for electronic warfare avionics
p0532 A78-49869
Multiprocessing tradeoffs and the wind-tunnel simulation problem
p0270 N78-19805
MULTISPECTRAL BAND SCANNERS
Geometric restitution of single coverage aircraft multispectral scanner data
p0280 A78-29854
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
Analysis of single and double coverage aircraft multispectral scanner arrays for positional data
p0267 N78-19553
Investigation of a high speed data handling system for use with multispectral aircraft scanners
[NASA-TM-78689] p0310 N78-20481
MULTISPECTRAL PHOTOGRAPHY
NT INFRARED PHOTOGRAPHY
NT RADAR PHOTOGRAPHY
Simultaneous sensor-presentation techniques study --- for attack aircraft
[AD-A043355] p0024 N78-10066
MULTISTAGE COMPRESSORS
U TURBOCOMPRESSORS
MULTIVARIATE STATISTICAL ANALYSIS
NT DISCRETE FUNCTIONS
NT REGRESSION ANALYSIS

N

N-156 AIRCRAFT
U P-5 AIRCRAFT
NACELLES
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
The effect of over-the-wing nacelles on wing-body aerodynamics
[AIAA PAPER 78-1083] p0466 A78-43589
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
Aerodynamic centre of wing-fuselage-nacelle combinations: Effect of wing-pylon mounted nacelles
[ESDU-77012] p0079 N78-12010
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] p0244 N78-18066
Test data report, low speed wind tunnel tests of a full scale lift/cruise-fan inlet, with engine, at high angles of attack
[NASA-CR-152055] p0252 N78-19049
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
Civil components program "Wing Section'. Preliminary design of engine mounting --- and nacelle mounting
[BHPT-PB-W-77-28] p0350 N78-22086
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
Winglet and long duct nacelle aerodynamic development for DC-10 derivatives
p0496 N78-29049
NASA PROGRAMS
NT ASSESS PROGRAM
NT ATLIT PROJECT
NT QUIET ENGINE PROGRAM
NT SUPERSONIC CRUISE AIRCRAFT RESEARCH
NT TACT PROGRAM
NT TERMINAL CONFIGURED VEHICLE PROGRAM
NT TILT ROTOR RESEARCH AIRCRAFT PROGRAM
Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Feasibility of modern airships - Preliminary assessment
p0050 A78-13416
Active controls for transports
p0112 A78-18020
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
Technology readiness for an SST
[AIAA PAPER 78-356] p0186 A78-24031
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
Composite structures for commercial transport aircraft
p0337 A78-34901
Aircraft flyover noise prediction
p0340 A78-35657
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Preliminary QCSEE program test results
[NASA-TM-73732] p0151 N78-15042
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
Bibliography of Lewis Research Center technical contributions announced in 1976
[NASA-TM-73860] p0213 N78-17921
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
Progress in supersonic cruise aircraft technology
[NASA-TM-78695] p0358 N78-23047
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Overview of NASA CTOL program
p0446 N78-27047
Bibliography of Lewis Research Center technical publications announced in 1977
[NASA-TM-78918] p0496 N78-28986
Summary of NASA landing-gear research
p0497 N78-29056
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055

Overview of the NASA YF-12 program
p0605 N78-32056
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
NASA STRUCTURAL ANALYSIS PROGRAM
U NASTRAN
NASTRAN
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
Substructure coupling: A different approach
p0091 N78-12455
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis --- NASTRAN
[AD-A048840] p0254 N78-19065
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
NATIONAL AIRSPACE UTILIZATION SYSTEM
Modernization program for the Iranian National Airspace System
p0596 A78-52971
NATIONAL AVIATION SYSTEM
FAA facilities maintenance cost reduction model
p0428 A78-43043
Aviation futures to the year 2000
p0595 A78-52966
Aircraft developments that hold promise for increased compatability with an advanced ATC system
p0595 A78-52967
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071
NATIONS
NT DEVELOPING NATIONS
NATURAL FREQUENCIES
U RESONANT FREQUENCIES
NATURAL GAS
NT LIQUEFIED NATURAL GAS
NAVIER-STOKES EQUATION
The next approximation after boundary layer theory --- machine blade associated unsteady flow effects
p0373 A78-37409
A new method of nozzle design
p0416 A78-40839
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Laminar hypersonic wake of a lifting body
p0426 A78-42763
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
NAVIGATION
NT AIR NAVIGATION
NT ALL-WEATHER AIR NAVIGATION
NT AREA NAVIGATION
NT DECCA NAVIGATION
NT DIGITAL NAVIGATION
NT DOPPLER NAVIGATION
NT HYBRID NAVIGATION SYSTEMS
NT INERTIAL NAVIGATION
NT LORAN
NT LORAN C
NT OMEGA NAVIGATION SYSTEM
NT RADAR NAVIGATION
NT RADIO NAVIGATION
NT SURFACE NAVIGATION
NT TACAN
NT VHF OMNIRANGE NAVIGATION
The evaluation of the operational characteristics of navigation systems
p0070 A78-15918
Navigation, guidance and control for high performance military aircraft
p0316 N78-21090
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
NAVIGATION AIDS
NT AIRPORT BEACONS
NT BEACONS
NT GYROCOMPASSES
NT LIGHT AIRBORNE MULTIPURPOSE SYSTEM
NT MICROWAVE SCANNING BEAM LANDING SYSTEM
NT NAVIGATION INSTRUMENTS
NT OMNIDIRECTIONAL RADIO RANGES
NT RADAR BEACONS
NT RADIO BEACONS
NT RADIO DIRECTION FINDERS
NT TERCOM
An overview of enroute radio navigation services for civil aviation
[AIAA 77-1509] p0007 A78-12255
Multi-system position determination - An innovative approach to low cost area navigation
[AIAA 77-1513] p0007 A78-12258
A computer controlled aircraft collision avoidance system
[AIAA 77-1524] p0008 A78-12264
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
Experience with the VOR navigation system in the German Democratic Republic. IV
p0051 A78-13502
Advanced navigation techniques using multiple systems
[AIAA 77-1554] p0051 A78-13652
Navigating Canada, to the end of the twentieth century
p0111 A78-17907
The Interim Standard Microwave Landing System
p0112 A78-17915
New generation of radio navigation equipment
p0115 A78-18665
Airborne navigation systems
p0170 A78-22347
Navigation procedure - Present systems and development trends
[DGLR PAPER 77-018] p0189 A78-24411
Generalized algorithm of the analytical method of gyrocompassing
p0216 A78-25013
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
Principles and simulation of JTIDS relative navigation --- Joint Tactical Information Distribution System
p0222 A78-26156
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523
System requirements for transition from enroute to approach guidance
p0370 A78-36453
Jeppesen charting for area navigation
p0370 A78-36454
New model VOR/DME
p0373 A78-37246
The distance measurement procedure DME. I --- for air navigation
p0469 A78-44198
Onboard radio-navigation and landing aids for aircraft --- Russian book
p0473 A78-44806
Investigation of the accuracy of one-way range measurements --- for radio navigation systems
p0476 A78-45158
Aviation control system devices --- Russian book
p0529 A78-49850
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
Advanced pattern matching for navigation and guidance
p0539 A78-49998
Aircraft guidance and flight safety - Current and future problems for research and industry
p0569 A78-50263
Current and future navigation and landing systems
p0569 A78-50265
Strategic or tactical air traffic control
p0570 A78-50447

An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
A study of the P-3C Omega navigation system
[AD-A044474] p0084 N78-12064
A state-of-the-art assessment of air data sensors for Naval aircraft
[AD-A046500] p0150 N78-15038
Evaluation of STOL navigation avionics
[NASA-CR-155566] p0208 N78-17051
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
New techniques for low cost strapdown inertial systems
p0315 N78-21073
Precise enroute navigation based on ground-derived techniques
p0315 N78-21078
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107
The effect of landing system coverage and path geometry on lateral position errors at the runway threshold
[NASA-TM-78744] p0451 N78-27100
Technical evaluation report on the 24th Guidance and Control Panel technical meeting: Symposium on Applications of Advances in Navigation to Guidance and Control
[AGARD-AR-115] p0452 N78-27109

NAVIGATION INSTRUMENTS
NT ATTITUDE INDICATORS
NT GYROCOMPASSES
NT RADIO DIRECTION FINDERS
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
Remote maintenance monitor systems --- for air navigation equipment
p0111 A78-17911
In search of a better approach concept - MLS and HUD --- Head-Up Display/Microwave Landing System
p0134 A78-20479
Testing a modern strike aircraft navigation system
p0175 A78-22852
ALIDADE - The alignment on board aircraft carriers of the inertial navigation units of Super-Etendard aircraft
p0217 A78-25149
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247
In-flight utilization of aircraft radio-navigation instruments --- Russian book
p0473 A78-44799
Communication and navigation antennas for aircraft --- Russian book
p0522 A78-48523
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120

NAVIGATION SATELLITES
NT AEROSAT SATELLITES
NT NAVSTAR SATELLITES
NT TRANSIT SATELLITES
The use of Doppler-shift position lines in satellite navigation systems
p0590 A78-51890
Satellites for position determination
p0601 A78-53911
Ionospheric effects on satellite navigation and air traffic control systems
p0365 N78-23325

NAVSTAR SATELLITES
Positioning and navigation by satellite --- for marine operations
[AIAA 77-1553] p0051 A78-13684
A Navstar/GPS simulator
p0062 A78-15592
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
Navstar GPS field test results
p0530 A78-49856
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
The Navstar Global Positioning System /GPS/
p0594 A78-52952

NAVY
V/STOL presentation --- for future Navy applications
p0109 A78-17880
VSTOL - Can Navy needs be met
[AIAA PAPER 78-322] p0185 A78-24016
US Navy examining a wide range of V/STOL concepts
p0274 A78-29175
Landing systems - The Navy viewpoint
p0281 A78-30097
A rigid airship concept for future naval operations
[AIAA PAPER 77-1195] p0333 A78-34014
The U.S. Navy bets on V/STOL --- technological integration for next generation aircraft design
p0525 A78-49550
Naval structural materials - Requirements, issues, and opportunities
p0583 A78-51149
The Navy's approach /Air traffic control/
p0595 A78-52969
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
A state-of-the-art assessment of air data sensors for Naval aircraft
[AD-A046500] p0150 N78-15038
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
Review of US Navy VSTOL handling qualities requirements
p0258 N78-19104
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
NAVTOLAND and flying qualities
p0260 N78-19120
US Navy/Marine Corps rotary wing requirements
p0262 N78-19132
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051
Status of the Navy's vertical short takeoff and landing aircraft
[PB-277401/6] p0440 N78-26140
Aircraft configurations for high-speed ships
[AD-A055540] p0610 N78-32092

NC-130 AIRCRAFT
U C-130 AIRCRAFT

NEAR FIELDS
Some singular aspects of three-dimensional transonic flow
p0223 A78-26234
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897

NEAR WAKES
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
Spanwise structure of the plane turbulent wake
p0221 A78-25777
Effect of blockage ratio on the turbulent near wake of a bluff body
p0224 A78-26489

Calculating the interaction of a turbulent near wake behind a step and a supersonic jet
p0230 A78-28057
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
Calculation of interaction of a turbulent near-wake behind a step with a supersonic jet
p0480 A78-46092
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997

NEODYMIUM LASERS
Space optical communications with the Nd:YAG laser
p0285 A78-30886

NETHERLANDS
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
Some aspects of offshore operations in the Netherlands
p0262 N78-19135
Review of aeronautical fatigue investigations in the Netherlands during the period April 1975 to February 1977
[NLR-MP-77005-U] p0494 N78-28494

NETS
Guidance and control problems in semiautomatic recovery of the Aquila RPV
[AIAA 78-1272] p0540 A78-50182

NETWORK SYNTHESIS
GDM/GPS receiver hardware implementation
p0062 A78-15589
High-voltage power supply problems and design techniques
p0065 A78-15654
Computer aided design of aircraft electrical systems
p0479 A78-45410

NEUTRAL BEAMS
NT NEUTRON BEAMS

NEUTRALIZERS
Neutralization problem for a Space Shuttle
p0507 A78-47124

NEUTRON BEAMS
The macroscopic detection of corrosion in aluminum aircraft structures with thermal neutron beams and film imaging methods
[PB-277074/1] p0364 N78-23214

NEUTRON SCATTERING
Application of small-angle neutron scattering to NDI of materials and manufactured components
p0443 N78-26465

NEVADA
Las Vegas graphic study
[AD-A052772] p0452 N78-27104

NEW JERSEY
TRSB microwave landing system demonstration program at Cape May, New Jersey, USA
[AD-A054605] p0488 N78-28070

NEW YORK
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037

NEWTON THEORY
Hypersonic flows
p0613 N78-32124

NICKEL ALLOYS
NT HASTELLOY (TRADEMARK)
NT INCONEL (TRADEMARK)
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
Large electroformed nickel moulds for aircraft parts
p0508 A78-47267
Reaction diffusion in the NiCrAl and CoCrAl systems
p0597 A78-53063
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478

NICKEL CADMIUM BATTERIES
Nickel/cadmium aircraft batteries: Battery alarm unit
[AD-A039521] p0310 N78-20631
Nickel/cadmium aircraft batteries: Rapid electrolyte exchange technique
[AD-A039335] p0311 N78-20632
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter
[AD-A039735] p0311 N78-20636

NIGHT FLIGHTS (AIRCRAFT)
Helicopter TF radar Pavelow III
p0068 A78-15697
A systems approach to heliport lighting
p0523 A78-49238
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084

NITRIC OXIDE
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116

NITRIDES
NT ALUMINUM NITRIDES
NT SILICON NITRIDES

NITROGEN
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097

NITROGEN COMPOUNDS
NT ALUMINUM NITRIDES
NT NITRIC OXIDE
NT NITROGEN OXIDES
NT SILICON NITRIDES

NITROGEN OXIDES
NT NITRIC OXIDE
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
Stratospheric cruise emission reduction program
p0040 N78-11077
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Augmentor emissions reduction technology program --- for turbofan engines
[NASA-CR-135215] p0097 N78-13057
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098

NMR
U NUCLEAR MAGNETIC RESONANCE

NOISE (SOUND)
NT AERODYNAMIC NOISE
NT AIRCRAFT NOISE
NT ENGINE NOISE
NT JET AIRCRAFT NOISE
NT SONIC BOOMS
Environmental Pollution. Noise pollution-noise effects on human performance
[AD-A041600] p0145 N78-14691
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894
NOISE ATTENUATION
U NOISE REDUCTION
NOISE ELIMINATION
U NOISE REDUCTION
NOISE GENERATORS
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
Aircraft noise and its sources
p0283 A78-30351
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
Noise component method for airframe noise
p0340 A78-35660
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Noise from separated flow of flat plate
p0577 A78-50622
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
Generation and suppression of fan-compressor noise
[FOK-3-1823] p0353 N78-22107
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
Noise due to rotor-turbulence interaction
p0619 N78-32823
NOISE HAZARDS
U NOISE (SOUND)
NOISE INTENSITY
Changes in ground noise levels of general aviation aircraft derived from changes in cockpit noise levels
p0002 A78-11488
Acoustical standards and their application to aircraft noise
p0341 A78-35661
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721
Noise in airports, its measurement, and its effect on the communities in the vicinity
p0519 A78-48374
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
Practice and principle in environmental noise rating
[NPL-AC-81] p0367 N78-23885
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873
NOISE MEASUREMENT
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
Problems of noise certifying business aircraft
p0015 A78-12824
The assessment of noise, with particular reference to aircraft
p0074 A78-16595
Sound separation probes for flowing duct noise measurements --- jet engine diagnostics
p0106 A78-17396
Noise research at DFVLR with relevance for industry
p0115 A78-18505
Flyover noise - Measurement and analysis
p0124 A78-19441
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Measuring noise in aircraft cabins
p0283 A78-30353
Noise component method for airframe noise
p0340 A78-35660
Acoustical standards and their application to aircraft noise
p0341 A78-35661
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
Airport noise monitoring
p0341 A78-35663
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
Investigation of ground reflection and impedance from flyover noise measurements
[NASA-CR-145302] p0251 N78-18874
Comparison of measured and calculated helicopter rotor impulsive noise --- wind tunnel test data and prediction analysis techniques
[NASA-TM-78473] p0311 N78-20917
A method for calculating externally blown flap noise
[NASA-CR-2954] p0311 N78-20920
Metrology of aircraft overflight noise. Errors due to its nonstationary character
p0358 N78-23038
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements --- computer program
[AD-A051700] p0403 N78-24899
YF 102 in-duct combustor noise measurement, volume 1
[NASA-CR-135404-VOL-1] p0412 N78-25827
YF 102 in-duct combustor noise measurement, volume 3
[NASA-CR-135404-VOL-3] p0412 N78-25829
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
Noise characteristics of upper surface blown configurations: Summary

[NASA-CR-2918] p0446 N78-26880
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874

NOISE POLLUTION
Changes in ground noise levels of general aviation aircraft derived from changes in cockpit noise levels
p0002 A78-11488
Aircraft noise control
p0015 A78-12814
Status of aircraft noise control in Israel
p0015 A78-12823
Research into effects of aircraft noise on hearing of children in exposed residential areas around an airport
p0117 A78-18779
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058
Status report on aircraft noise certification
p0340 A78-35652
Results of Concorde monitoring
p0340 A78-35655
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
Aircraft flyover noise prediction
p0340 A78-35657
Noise component method for airframe noise
p0340 A78-35660
Airport noise monitoring
p0341 A78-35663
Synthesis of social surveys on noise annoyance
p0517 A78-48051
Noise in airports, its measurement, and its effect on the communities in the vicinity
p0519 A78-48374
Current state of the law in aircraft noise pollution control
p0583 A78-51130
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624
Environmental Pollution. Noise pollution-noise effects on human performance
[AD-A041600] p0145 N78-14691
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
Helicopter external noise requirements: FAA perspective
p0618 N78-32817
Helicopter noise regulations: An industry perspective
p0618 N78-32818
Noise requirements from a military point of view
p0619 N78-32819
The impact of urban operations on helicopter noise requirements
p0619 N78-32820
Theoretical models of helicopter rotor noise
p0619 N78-32822
Noise due to rotor-turbulence interaction
p0619 N78-32823
Annoyance due to the interaction of community noise sources
p0634 N78-33613
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615
Urban noise pollution. A bibliography with abstracts
[NTIS/PS-78/0686/2] p0634 N78-33634

NOISE PROPAGATION
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
Aircraft flyover noise prediction
p0340 A78-35657
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
Long-distance focusing of Concorde sonic boom
p0517 A78-48052
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
Aircraft noise propagation --- sound diffraction by wings
p0445 N78-26879
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
Theory on acoustic sources
p0619 N78-32824
A study of the noise radiation from four helicopter rotor blades --- tests in Ames 40 by 20 foot wind tunnel
p0621 N78-32835

NOISE REDUCTION
Aircraft noise control
p0015 A78-12814
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
New airport in Gothenburg - How the noise problems have been handled
p0015 A78-12822
Status of aircraft noise control in Israel
p0015 A78-12823
The quiet battle over aircraft noise
p0058 A78-15167
The analysis of helicopter rotor noise
p0059 A78-15295
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
Generation and suppression of fan-compressor noise
p0075 A78-16599
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
The influence of engine position on aircraft noise
p0121 A78-19083
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
The policy problems and economics of aircraft noise
p0122 A78-19128
Core engine noise reduction - Definition and trends --- aircraft turboengine noise
[AIAA PAPER 77-1273] p0130 A78-19978
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
EBF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Big fans for the airlines
p0170 A78-22269
Advanced quiet propulsion for general aviation
[DGLR PAPER 77-044] p0190 A78-24433
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an

anechoic chamber
p0215 A78-24880
Study of the propagation of higher modes in cylindrical ducts with impedance walls --- for aircraft noise reduction
p0221 A78-25773
Aircraft noise and its sources
p0283 A78-30351
Methods of reducing aircraft noise
p0283 A78-30355
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
The energy costs of some noise abatement procedures
p0288 A78-31313
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
Aircraft noise --- aerodynamic engineering for noise reduction
p0329 A78-33085
Prospects for supersonic jet noise suppression
p0329 A78-33089
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
Rotor-stator interaction noise with hindsight --- turbomachine acoustics
p0329 A78-33093
Status report on aircraft noise certification
p0340 A78-35652
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
State-of-the-art of turbofan engine noise control
p0340 A78-35658
Some advances in design techniques for low noise operation of propellers and fans
p0340 A78-35659
The reduction of the annoyance caused by subsonic jet aircraft noise
p0343 A78-35975
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
A study of fan-rotating noise reduction
p0577 A78-50620
Noise control analysis for gas turbine installations
p0577 A78-50621
Broadband noise in axial-fan blade cascade
p0579 A78-50650
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
High velocity jet noise source location and reduction. Task 1 supplement: Certification of the General Electric jet noise anechoic test facility
[AD-A042327/7] p0031 N78-10119
A study of acoustic disturbances and means of suppression in ventilated transonic wind tunnel walls
[AD-A045347] p0100 N78-13080
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053
EBF noise suppression and aerodynamic penalties
[NASA-TM-73823] p0155 N78-15852
Exploratory investigation of decelerating approaches of a twin-engined jet transport. Volume 2: Moving-base simulation and comparison with related experiments
[NLR-TR-76150-U] p0155 N78-15859
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Research Requirements for the improvement of helicopter operations
p0263 N78-19147
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report --- outdoor static and 40 x 80 ft. wind tunnel tests
[NASA-CR-152076] p0271 N78-19899
Use of leaning vanes in a two stage fan
[NASA-CR-152134] p0319 N78-21115
Airport and aircraft noise reduction
[GPO-91-591] p0326 N78-21891
Generation and suppression of fan-compressor noise
[FOK-3-1823] p0353 N78-22107
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Optimal guidance and control for investigating aircraft noise-impact reduction
[NASA-TP-1237] p0363 N78-23100
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
Acoustic evaluation of a novel swept-rotor fan --- noise reduction in turbofan engines
[NASA-TM-78878] p0403 N78-24897
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2 --- jet aircraft noise
[NASA-CR-145262] p0404 N78-24900
Aircraft noise propagation --- sound diffraction by wings
p0445 N78-26879
Prediction of aircraft sideline noise attenuation
[NASA-TM-78717] p0460 N78-27871
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
Reference aircraft for ICAO Working Group E
[NASA-CR-158929] p0609 N78-32087
Laboratory and community studies of aircraft noise effects

[NASA-TM-78776] p0618 N78-32815
Prediction and reduction of rotor broadband noise p0619 N78-32821
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction p0621 N78-32834

NOISE SPECTRA
Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure p0134 A78-20469
The noise from the large-scale structure of a jet p0227 A78-27144
Evaluation of airframe noise prediction methods p0329 A78-33088
Azimuthal decomposition of the power spectral density of jet noise p0375 A78-37532
Calculation of far-field jet noise spectra from near-field measurements using true source location [AIAA PAPER 78-1153] p0422 A78-41852
An acoustic range for the measurement of the noise signature of aircraft during flyby operations p0508 A78-47242
Minimum on-axis noise for a propeller or helicopter rotor p0590 A78-51949

NOISE SUPPRESSORS
U NOISE REDUCTION

NOISE TEMPERATURE
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz p0385 A78-39105

NOISE THRESHOLD
Synthesis of social surveys on noise annoyance p0517 A78-48051

NOISE TOLERANCE
Aircraft and helicopter cockpit noise p0278 A78-29673
Psychological Assessment of Aircraft Noise Index p0291 A78-32058
The reduction of the annoyance caused by subsonic jet aircraft noise p0343 A78-35975
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport [TT-7705] p0556 N78-30910
A comparison of annoyance caused by aircraft noise near London, Manchester and Liverpool airports [TT-7706] p0557 N78-30911

NOMINAL VALUES
U APPROXIMATION

NONADIABATIC PROCESSES
U HEAT TRANSFER

NONCONDUCTORS
U ELECTRICAL INSULATION

NONDESTRUCTIVE TESTS
NT STATIC FIRING
Manufacture of titanium components by hot isostatic pressing p0013 A78-12456
Recent developments in automatic testing p0108 A78-17663
Current status and examples of nondestructive testing for aircraft materials p0119 A78-19055
Holographic inspection of jet engine composite fan blades [SAE PAPER 770975] p0179 A78-23819
NDT of DC-10 graphite-epoxy rudder p0339 A78-35445
Nondestructive testing of adhesive bonded structure p0480 A78-45937
NDE: A key to engine rotor life prediction p0027 N78-10087
Nondestructive pavement evaluation [AD-A052707] p0400 N78-24159
Non-destructive method for applying and removing instrumentation on helicopter rotor blades [NASA-CASE-LAR-11201-1] p0402 N78-24515
Non-destructive inspection relationships to aircraft design and materials --- conferences [AGARD-CP-234] p0443 N78-26460
NDI techniques in aerospace p0443 N78-26461
Critical review of various structural safety concepts taking into account NDI methods p0443 N78-26462
The economic implications of NDE: Opportunities and payoff p0443 N78-26463
Unfulfilled needs of non-destructive inspection of military aircraft p0443 N78-26464
Application of small-angle neutron scattering to NDI of materials and manufactured components p0443 N78-26465
Surface corrosion evaluation by relative magnetic susceptibility measurements p0443 N78-26466
Application of X-ray diffraction stress measuring techniques --- to aircraft structures p0443 N78-26467
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy --- jet engine compressor blades p0444 N78-26468
On the detection and measurement of cracks in critically loaded holes p0444 N78-26469
Dynamic nondestructive testing of materials p0444 N78-26470
NDI methods on full-scale fatigue tests and their service usage p0444 N78-26471
Critical inspection of bearings for life extension p0444 N78-26472
Non-destructive inspection of composite materials for aircraft structural applications p0444 N78-26474
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures p0444 N78-26475
Inspection of carbon fibre parts after fabrication and during service p0444 N78-26476
Detectability of flaws in boron and carbon composite parts p0444 N78-26477
The present status and evolution of the inspection of carbon composite aircraft structures in France p0444 N78-26478
Detection of flaws in metallic and non-metallic composite structures using liquid crystal technology p0445 N78-26480
Preliminary investigation into the application of magnetic rubber inspection (M.R.I.) [NLR-TR-76083-U] p0445 N78-26507
NDI and the detection of fatigue p0554 N78-30282
Piezoelectric polymer transducers for detection of structural defects in aircraft [AD-A055729] p0621 N78-32903

NONEQUILIBRIUM DRAG
U FRICTION DRAG

NONEQUILIBRIUM FLOW
Nonequilibrium reverse flow in a Laval nozzle p0128 A78-19681
Similar solutions in nonequilibrium nozzle flows p0221 A78-25728
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle p0273 A78-28610
Investigation of nonequilibrium two-phase flows in axisymmetric Laval nozzles p0518 A78-48244
Similarity considerations for nonequilibrium nozzle flows p0583 A78-51163

NONFLAMMABLE MATERIALS
Study to develop improved fire resistant aircraft passenger seat materials, phase 1 [NASA-CR-152056] p0036 N78-11042
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs [AD-A046824] p0153 N78-15287

NONHOMOGENEITY
U INHOMOGENEITY

NONLINEAR EQUATIONS
Continuation and direct solution of the flutter equation p0221 A78-25703

Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
NONLINEAR FILTERS
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
NONLINEAR PROGRAMMING
Solution of transient optimization problems by using an algorithm based on nonlinear programming
p0184 A78-23909
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
NONLINEAR SYSTEMS
Observability criteria for nonlinear dynamic systems subjected to multiparameter measurements --- noting air navigation applicability
p0274 A78-29089
Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
Determination of nonlinearities of dynamic stability --- of wind tunnel models
[ONERA, TP NO. 1978-52] p0479 A78-45280
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0494 A78-46559
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
Flutter of control surfaces with structural nonlinearities --- missile control surfaces
[AD-A045221] p0099 N78-13073
A perturbation method for predicting amplitudes of nonlinear wheel shimmy
p0325 N78-21464
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840
A theory for longitudinal short-period pilot induced oscillations
[AD-A056982] p0630 N78-33120
NONLINEARITY
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016
Modification of aerojet cumulative damage criterion to utilize nonlinear stress allowable
p0100 N78-13223
Significance of structural nonlinearities from the structural dynamics and aeroelasticity point of view
p0204 N78-17005
Effects of structural non-linearities on aircraft vibration and flutter
[AGARD-R-665] p0211 N78-17076
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
NONNEWTONIAN FLOW
Basic problem of control of the motion of a non-Newtonian fluid in a gap --- roll forming of aircraft plastics
p0292 A78-32257
NONSTABILIZED OSCILLATION
Theory of two frequency ranges of unstable oscillations of turbulent combustion in a jet-engine chamber. I - Formulation of the stability problem, the characteristic equation
p0187 A78-24253
NONUNIFORM FLOW
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
Airfoil profile in a nonuniform flow
[NASA-TM-75272] p0312 N78-21048
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118
NONVISCOUS FLOW
U TURBULENT FLOW
NORMAL FORCE DISTRIBUTION
U FORCE DISTRIBUTION
NORMAL SHOCK WAVES
Turbulent boundary layer separation on a curved wall with normal compression shock
p0583 A78-51155
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
NORTH AMERICAN AIRCRAFT
NT B-1 AIRCRAFT
NT F-100 AIRCRAFT
NORTH ATLANTIC TREATY ORGANIZATION (NATO)
Tornado vital for NATO's changing requirements
p0059 A78-15383
NORTHERN HEMISPHERE
NT ARCTIC REGIONS
NORTHROP AIRCRAFT
NT F-5 AIRCRAFT
NT F-18 AIRCRAFT
NORWAY
Air-sea rescue operations. Search and rescue experience
p0262 N78-19134
TRSB microwave landing system demonstration program at Kristiansand, Norway
[AD-A055317] p0559 N78-31071
NOSE CAPS
U NOSE CONES
NOSE CONES
NT ABLATIVE NOSE CONES
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
NOSE FINS
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
NOSES (FOREBODIES)
NT ABLATIVE NOSE CONES
NT NOSE CONES
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
Simplified input for certain aerodynamic nose configurations to the Grumman quick-geometry system. A KWIKNOSE user's manual
[AD-A051425] p0394 N78-24089
NOTATION
U CODING
NOTCH TESTS
Structural fatigue reliability based on test results. I
p0057 A78-15025
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
NOTCHED METALS
U NOTCH TESTS
NOXIOUS MATERIALS
U CONTAMINANTS
NOZZLE COEFFICIENT
U NOZZLE FLOW
NOZZLE DESIGN
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635

Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
Development of low pressure ratio vectoring nozzles for V/STOL aircraft
[SAE PAPER 770988] p0180 A78-23825
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
Uniqueness 'in the large' of the solution to the direct problem of the Laval nozzle
p0376 A78-37613
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor --- in aircraft design
p0481 A78-46354
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143
Advance nozzle technology
p0550 N78-30111

NOZZLE EFFICIENCY
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400

NOZZLE FLOW
The time response of an aspirating probe in gas sampling
p0001 A78-10600
Flow starting times in constant-area supersonic diffusers
p0076 A78-16810
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
Hypersonic flow of a viscous gas in a nozzle
p0127 A78-19651
Nonequilibrium reverse flow in a Laval nozzle
p0128 A78-19681
The prediction of the performance of low pressure-ratio thrust-augmenter ejectors
[AIAA PAPER 78-145] p0159 A78-20704
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
Velocity profiles in the Laval nozzle throat for uniform compressible swirling flow
p0165 A78-20905
Characteristics of the jet acceleration of a flow to hypersonic speeds
p0166 A78-20953
Calculation of the Laval-nozzle flow by a modified Lax-Wendroff method of second-order accuracy
p0166 A78-20970
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
Computation of the base pressure in ejector nozzles of different length with zero coefficient of ejection
p0168 A78-21098
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635
The start-up of a gas turbine engine using compressed air tangentially fed onto the blades of the basic turbine
p0187 A78-24149
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
Similar solutions in nonequilibrium nozzle flows
p0221 A78-25728
Swirl flow in conical diffusers
p0230 A78-27910
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle
p0379 A78-38641
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
Possibilities of phase separation in supersonic two-phase flows
p0426 A78-42630
Construction of higher approximations in the problem of special flows in plane Laval nozzles
p0426 A78-42764
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
Numerical study of flow in axisymmetric Laval nozzles, taking account of overexpansion with flow separation
p0429 A78-43114
The effect of two-dimensionality of the flow of a gas with stepwise distribution of total parameters on the integral characteristics of a Laval nozzle
p0429 A78-43116
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833
Experimental determination of propulsion induced ground effects of typical three fan type A V/STOL configurations
[AIAA PAPER 78-1507] p0516 A78-47943
Investigation of nonequilibrium two-phase flows in axisymmetric Laval nozzles
p0518 A78-48244
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Calculations of flows in flat asymmetric nozzles for overexpanded conditions
p0581 A78-50782
Similarity considerations for nonequilibrium nozzle flows
p0583 A78-51163
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029

NOZZLE GEOMETRY
Flow starting times in constant-area supersonic diffusers

p0076 A78-16810
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor --- in aircraft design
p0481 A78-46354
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496
The effects of cam and nozzle configurations on the performance of a circulation control rotor pneumatic valving system
[AD-A050494] p0352 N78-22103
USB flow characteristics related to noise generation
p0391 N78-24060
NOZZLE INSERTS
The aerodynamic performance of a freely hinged door between two flows --- for supersonic transport propulsion nozzles
p0586 A78-51464
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TN-D-8449] p0081 N78-12037
NOZZLE THRUST COEFFICIENTS
Thrust characteristics of thrust vector control systems with blowing injection of chemically nonreactive gases
p0187 A78-24254
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100
NOZZLE WALLS
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
NOZZLES
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
NUCLEAR EXPLOSIONS
NT THERMONUCLEAR EXPLOSIONS
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122
NUCLEAR MAGNETIC RESONANCE
Hydrogen content of hydrocarbon fuels by a low-resolution nuclear resonance method
[AD-A054465] p0503 N78-29262
NUCLEAR POWERED SHIPS
Deadload calibration program of CVN 68 catapult configuration
[AD-A042225] p0043 N78-11123
NUCLEAR PROPULSION
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
NUCLEAR RADIATION
NT NEUTRON BEAMS
External interaction of the nuclear EMP with aircraft and missiles
p0169 A78-21989
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
NUCLEAR REACTIONS
NT NEUTRON SCATTERING
NUCLEAR REACTORS
NT TOKAMAK DEVICES
NUCLEAR SCATTERING
NT NEUTRON SCATTERING
NUCLEATION
NT CLOUD SEEDING
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
Assessment of atmospheric condensation nuclei associated with jet aircraft traffic
[AD-A054319] p0504 N78-29705
NUCLIDES
NT RADIOACTIVE ISOTOPES
NT ZIRCONIUM 95
NUMERICAL ANALYSIS
NT APPROXIMATION
NT ERROR ANALYSIS
NT FINITE DIFFERENCE THEORY
NT FINITE ELEMENT METHOD
NT INTERPOLATION
NT ITERATIVE SOLUTION
NT LEAST SQUARES METHOD
NT MONTE CARLO METHOD
NT NUMERICAL INTEGRATION
NT RELAXATION METHOD (MATHEMATICS)
Analysis of lateral dynamic stability of an airplane with deformable control systems. II - Numerical analysis
p0108 A78-17642
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
Factorization methods in hydroaeromechanics --- Russian book
p0378 A78-37887
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
The closed spline functions --- applied to interpolation problems for airfoils
p0415 A78-40493
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
Hermite closed splines
p0527 A78-49713
Gesellschaft fuer angewandte Mathematik und Mechanik, Annual Scientific Meeting, Lyngby, Denmark, May 31-June 3, 1977, Reports. Part 2
p0583 A78-51151
Calculation of local three-dimensional supersonic fields
p0584 A78-51184
Mathematical analysis of impact erosion --- of supersonic flight vehicles
p0588 A78-51711
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
Analytical study of a free-wing/free-trimmer concept --- for gust alleviation and high lift
[NASA-CR-2946] p0236 N78-18000
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052

Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-19778
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Critical issues in viscous flow computations
p0270 N78-19792
Prospects for computational aerodynamics --- integro-differential formulation
p0270 N78-19795
Unsteady aerodynamics --- conference emphasizing numerical analysis of three dimensional flows
[AGARD-CP-227] p0345 N78-22033
Numerical study of laminar unsteady flow over airfoils
p0358 N78-23049
Numerical calculation of transonic flow past a swept wing by a finite volume method
[NASA-CR-157012] p0403 N78-24808
A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081

NUMERICAL CONTROL
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
Automated channel and trough-shaped surface design system algorithm --- for aircraft
p0049 A78-13174
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914
Introduction of NC machines in aircraft industry
p0123 A78-19411
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
Integrated controls for a new aircraft generation
p0231 A78-28219
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
A computer-controlled system for fatigue testing under simulated service loading --- for aircraft structures
p0420 A78-41519
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0484 A78-46559
Digital control law synthesis in the w prime domain
p0507 A78-46962
Design and development of a multifunctional helicopter control system
p0524 A78-49396
The evolution of a remotely piloted vehicle microprocessor flight control system
[AIAA 78-1273] p0541 A78-50183
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
Research and development of digital jet-engine controls
p0578 A78-50626
Numerical aerodynamic simulation facility. Preliminary study extension. Executive summary
[NASA-CR-152106] p0252 N78-19050

NUMERICAL FLOW VISUALIZATION
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995
Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-19778
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
Remarks on future computational aerodynamics requirements --- government/industry relations
p0269 N78-19785
Future requirements and roles of computers in aerodynamics
p0269 N78-19786
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Computational aerodynamics requirements in conjunction with experimental facilities --- wind tunnel test data
p0269 N78-19788
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist --- computer systems design
p0269 N78-19789
Viscous flow simulations in VTOL aerodynamics --- finite difference technique
p0269 N78-19791
Critical issues in viscous flow computations
p0270 N78-19792
Viscous flow simulation requirements --- of aerodynamic interest
p0270 N78-19793
Prospects for computational aerodynamics --- integro-differential formulation
p0270 N78-19795

NUMERICAL INTEGRATION
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
Modification of aerojet cumulative damage criterion to utilize nonlinear stress allowable
p0100 N78-13223

NYQUIST FREQUENCIES
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334

O

O RING SEALS
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686

OBLIQUE SHOCK WAVES
Supersonic axial compressors with predeceleration by oblique shocks
p0119 A78-19045
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle
p0379 A78-38641
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185

OBLIQUE WINGS
Theoretical and experimental analysis of longitudinal and lateral aerodynamic characteristics of skewed wings at subsonic speeds to high angles of attack
[NASA-TN-D-8512] p0093 N78-13015
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
[NASA-TM-78439] p0095 N78-13037

OBSERVATION
NT VISUAL OBSERVATION

OBSERVATION AIRCRAFT
NT F-5 AIRCRAFT
NT OH-6 HELICOPTER
NT P-1127 AIRCRAFT
NT U-2 AIRCRAFT
OBSTRUCTING
U BLOCKING
OCEAN DATA ACQUISITIONS SYSTEMS
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
OCEAN DATA PLATFORMS
U OCEAN DATA ACQUISITIONS SYSTEMS
OCEAN DATA STATIONS
U OCEAN DATA ACQUISITIONS SYSTEMS
OCEAN SURFACE
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
OCEANOGRAPHY
Airborne Oceanographic Lidar System
p0053 A78-14878
OCEANS
NT PACIFIC OCEAN
ODAS
U OCEAN DATA ACQUISITIONS SYSTEMS
OFF-ON CONTROL
Visually Activated Switching System --- using helmet-mounted IR transmitter for avionics control
p0067 A78-15669
Solution of transient optimization problems by using an algorithm based on nonlinear programming
p0184 A78-23909
OFFSHORE ENERGY SOURCES
Some aspects of offshore operations in the Netherlands
p0262 N78-19135
OFFSHORE PLATFORMS
Looking offshore at the airport future
p0282 A78-30245
OGEE SHAPE
Pressure distribution on a symmetrical butterfly wing
p0415 A78-40799
Full-scale testing of an Ogee tip rotor --- in the Langley whirl tower
p0620 N78-32830
OGEE WINGS
U VARIABLE SWEEP WINGS
OGIVES
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
Hypersonic heat transfer test program in the VKI longshot facility --- ogive body configuration
[AD-A050295] p0302 N78-20086
OH-6 HELICOPTER
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
Evaluation of a circulation control tail boom for yaw control --- OH-6 helicopter
[AD-A055116] p0564 N78-31119
OH-58 HELICOPTER
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
OILS
NT CRUDE OIL
NT LUBRICATING OILS
NT SHALE OIL
OMEGA NAVIGATION SYSTEM
Comparisons of tabular and observed Omega corrections through use of spectral analysis techniques
p0070 A78-15920
A simplification in position determination with the Omega system
p0070 A78-15921
Omega ambiguity resolution techniques
p0111 A78-17913
Omega Navigation System - Present status and plans 1977-1980
p0112 A78-17916
Airborne navigation systems
p0170 A78-22347
Correlation of the errors of the Omega radio navigation system
p0475 A78-45118
RNAV - Corporate operators set the pace
p0509 A78-47424
The Omega radionavigation system comes to the Pacific Ocean area
p0525 A78-49660
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
A study of the P-3C Omega navigation system
[AD-A044474] p0084 N78-12064
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075
OMNIDIRECTIONAL ANTENNAS
NT MONOPOLE ANTENNAS
OMNIDIRECTIONAL RADIO RANGES
New model VOR/DME
p0373 A78-37246
High-altitude area navigation (RNAV) enroute simulation
[AD-A049315] p0257 N78-19088
OMNIRANGE NAVIGATION
U VHF OMNIRANGE NAVIGATION
ONBOARD COMPUTERS
U AIRBORNE/SPACEBORNE COMPUTERS
ONBOARD EQUIPMENT
NT AIRBORNE EQUIPMENT
NT AIRBORNE/SPACEBORNE COMPUTERS
NT AIRCRAFT EQUIPMENT
NT BOMBING EQUIPMENT
NT LIGHT AIRBORNE MULTIPURPOSE SYSTEM
NT TERCOM
An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948
ALIDADE - The alignment on board aircraft carriers of the inertial navigation units of Super-Etendard aircraft
p0217 A78-25149
Applications of new visualization techniques to on-board equipment
p0343 A78-35974
Data transmission aboard aircraft
p0417 A78-40869
Requirements for aircraft on board weight and balance system
[SAE ARP 1409] p0472 A78-44692
In-flight utilization of aircraft radio-navigation instruments --- Russian book
p0473 A78-44799
Onboard radio-navigation and landing aids for aircraft --- Russian book
p0473 A78-44806
AIDS - Aircraft-integrated-data-system
p0600 A78-53675
OPENINGS
NT APERTURES
Cutout reinforcement of stiffened cylindrical shells
[AIAA 78-512] p0279 A78-29811
OPERATING SYSTEMS (COMPUTERS)
The DAIS Executive - An introduction --- avionics computer software
p0534 A78-49932
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
OPERATING TEMPERATURE
The 0.1m subsonic cryogenic tunnel at the University of Southampton
[NASA-CR-145305] p0247 N78-18086
OPERATIONAL HAZARDS
NASA's aviation safety research and technology program
p0268 N78-19719
OPERATIONAL PROBLEMS
Why fly supersonically --- flight time reduction vs fuel consumption and low payload

p0109 A78-17889
A critical look at V/STOL technology
[AIAA PAPER 78-1526] p0481 A78-46502
ATC system current and projected problems and recommended solutions - An airline pilot's view
[AIAA PAPER 78-1539] p0482 A78-46511
An integrated analysis of the fundamental problems of air transport
p0525 A78-49447
Operational regularity in air transport
p0525 A78-49449
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta --- hull temperature, flight data, operational problems
[DLR-IB-536-77/1] p0238 N78-18012
Problems pilots face involving wind shear
p0268 N78-19722
Improving readiness: A cost-effective approach
[AD-A050765] p0345 N78-22021

OPERATIONS RESEARCH
Simulation as a routine tool for resource and workload planning --- for aircraft engine repair and overhaul cycles
p0052 A78-13850
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061

OPERATORS (MATHEMATICS)
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182

OPERATORS (PERSONNEL)
NT AIRCRAFT PILOTS
NT TEST PILOTS

OPTICAL ABSORPTION
U LIGHT TRANSMISSION

OPTICAL COMMUNICATION
Space optical communications with the Nd:YAG laser
p0285 A78-30886
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816

OPTICAL COUPLING
Aircraft R-Nav system connected on optical bus
p0054 A78-14941

OPTICAL EQUIPMENT
NT CAMERAS
NT COLLIMATORS
NT ELLIPSOMETERS
NT INFRARED SPECTROMETERS
NT LASER DOPPLER VELOCIMETERS
NT MULTISPECTRAL BAND SCANNERS
NT OPTICAL GYROSCOPES
NT OPTICAL MEASURING INSTRUMENTS
NT OPTICAL RADAR
NT OPTICAL SCANNERS
NT PRISMS
NT TELEVISION CAMERAS
NT WIDE ANGLE LENSES
Vibration control of optical packages in aircraft
p0063 A78-15594
Optical simulator with a holographic component --- infinity display system
[AIAA 78-1581] p0579 A78-50671

OPTICAL FILTERS
NT INFRARED FILTERS

OPTICAL GYROSCOPES
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162

OPTICAL IMAGES
U IMAGES

OPTICAL MASERS
U LASERS

OPTICAL MEASUREMENT
Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068

OPTICAL MEASURING INSTRUMENTS
NT ELLIPSOMETERS
NT INFRARED SPECTROMETERS
NT MULTISPECTRAL BAND SCANNERS
NT OPTICAL SCANNERS
Laser and optical methods of monitoring in aircraft construction --- Russian book
p0281 A78-30123
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474

OPTICAL PROPERTIES
NT COLOR
NT REFLECTANCE
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064

OPTICAL RADAR
Airborne Oceanographic Lidar System
p0053 A78-14878
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632

OPTICAL RANGE FINDERS
NT LASER RANGE FINDERS

OPTICAL SCANNERS
NT MULTISPECTRAL BAND SCANNERS
Microwave landing systems --- time reference scanning beam used to determine aircraft approach
p0275 A78-29221

OPTICAL SENSORS
U OPTICAL MEASURING INSTRUMENTS

OPTICAL SIGNALS
U OPTICAL COMMUNICATION

OPTICAL SLANT RANGE
The FAA Slant Visibility Range measurement system
p0056 A78-14996

OPTICAL TRACKING
Wright-Patterson Air Force Base laser tracker
p0124 A78-19437
Multiple laser tracker operations
p0124 A78-19438

OPTICAL WAVEGUIDES
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976
Fiber optics, volume 2. Citations from the NTIS data base
[NTIS/PS-78/0713/4] p0636 N78-33918

OPTIMAL CONTROL
NT TIME OPTIMAL CONTROL
A proposed scheme for maneuver-dependent control of stability
p0050 A78-13417
Application of near-optimal differential game feedback strategies to aircraft weapon delivery maneuvers
p0063 A78-15628
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
New frequency domain methods for system identification
p0182 A78-23883
Optimal controls for an advanced turbofan engine
p0183 A78-23893

Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
Solution of transient optimization problems by using an algorithm based on nonlinear programming
p0184 A78-23909
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
Sensitivity reduction in aircraft control systems
p0285 A78-31034
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
Optimal flare in presence of wind shears --- for aircraft in automatic approach
p0385 A78-39186
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
Gust-alleviation control systems for aircraft
p0470 A78-44397
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
Stability augmentation by eigenvalues control and model matching
p0507 A78-46965
Optimal control synthesis in distributed systems with incomplete information --- noting aircraft applications
p0518 A78-48215
Optimization techniques for air traffic control problems --- Russian book
p0522 A78-48504
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
Optimal flight control synthesis via pilot modeling
[AIAA 78-1286] p0541 A78-50193
Optimization and differential games
p0592 A78-52401
Optimal control of aircraft powerplant --- Russian book
p0597 A78-53119
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
Quasi-optimal control of a moving-base simulator
p0357 N78-23021
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024
A new formulation for the epsilon method applied to the minimum-time-to-climb problem
p0357 N78-23028
Determination of optimal control using imbedding of the terminal conditions
p0357 N78-23029
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
Trajectory optimization for some sailplane performance problems
p0560 N78-31083

OPTIMIZATION
NT FLIGHT OPTIMIZATION
NT OPTIMAL CONTROL
NT TIME OPTIMAL CONTROL
NT TRAJECTORY OPTIMIZATION
Optimization of helicopter design. I
p0004 A78-12225
Optimalization of helicopter design. II
p0053 A78-14085
Methodology for optimizing an air fleet
p0116 A78-18668
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684
Optimum schedule for replacement of aircraft system parts under incomplete information on their reliability
p0164 A78-20879
Taking structural and technological constraints into account in the design of maximum-stiffness load-bearing structures
p0164 A78-20880
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
Aerodynamic optimization and analysis as part of the computer-aided design process
[AIAA PAPER 78-97] p0172 A78-22572
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
Optimal aperture-shape for an antenna array --- for radio navigation of flight vehicles
p0228 A78-27406
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
Optimum design of wind tunnel contractions
[AIAA 78-819] p0297 A78-32373
Minimum drag surfaces --- for traveling projectiles
p0342 A78-35787
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182
Optimization of the cooling system of an air-cooled internal combustion engine
p0419 A78-41510
On the theory of drag calculation and profile optimization in shockless near free molecular flow
p0510 A78-47887
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
Search-method optimization of the balancing of flexible rotors of gas turbine engines
p0581 A78-50795
Methodology questions involved in systems engineering for devising an optimum radio-engineering system for trajectory measurements --- of space vehicles
p0598 A78-53253
The optimum shape of the aperture of an antenna array --- for radio navigation of aircraft
p0598 A78-53257
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
Optimal aircraft simulator development by adaptive random search optimization
p0246 N78-18082
System optimization by periodic control
[AD-A049522] p0323 N78-21162
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Optimal missile evasion
[AD-A053267] p0439 N78-26135
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
The lifting wing with minimum drag in supersonic flow
[VTH-LR-234] p0488 N78-28065
Control system design using vector-valued performance criteria with application to the

control rate reduction in parameter insensitive control systems
[DLR-FB-77-55] p0565 N78-31125
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
Modifications and improvements in a structural optimization scheme based on an optimality criterion
[AD-A055941] p0609 N78-32088
OPTIMUM CONTROL
U OPTIMAL CONTROL
ORBIT EQUATIONS
U ORBITAL MECHANICS
ORBITAL ASSEMBLY
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
ORBITAL MECHANICS
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
ORBITAL POSITION ESTIMATION
Differential altimetry for satellite orbit determination
p0289 A78-31915
ORBITAL SPACE STATIONS
NT EOSS
ORBITS
NT EARTH ORBITS
NT SATELLITE ORBITS
ORDNANCE
Safe air-space requirements above an explosive-ordnance test facility
[NRL-R-711] p0451 N78-27092
ORGANIC COMPOUNDS
NT FLUOROCARBONS
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
ORGANIC LASERS
NT DYE LASERS
ORGANIZATIONS
NT EUROPEAN SPACE AGENCY
NT NORTH ATLANTIC TREATY ORGANIZATION (NATO)
ORGANOMETALLIC COMPOUNDS
NT FERROCENES
ORION AIRCRAFT
U P-3 AIRCRAFT
ORNITHOPTER AIRCRAFT
U RESEARCH AIRCRAFT
ORTHOGONAL FUNCTIONS
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270
OSCILLATING FLOW
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
The effect of fluid oscillations in a fuel line on the pressure head of a pump operating in a regime without reverse streams
p0187 A78-24259
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845
Application of the integral-transformation method to three-dimensional unsteady problems of the theory of cascades
p0370 A78-36366
Investigations of the transonic flow around oscillating airfoils --- Thesis
p0383 A78-38978
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
Model calculations of the generation of self-excited oscillations in a supersonic duct with stepwise widening of cross section
p0584 A78-51165
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
Investigations of the intensity of oscillations of the boundary of a turbulent wake
p0586 A78-51402
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
Research on unsteady turbulent boundary layers
p0146 N78-14992
The interference problem of the oscillating fuselage near ground
p0204 N78-17008
An experimental investigation of oscillating flows over an airfoil --- rotary wings
p0299 N78-20058
Features of unsteady flows over airfoils
p0346 N78-22054
Aerodynamic phenomena in an oscillating transonic MCA airfoil cascade including loading effects
p0347 N78-22066
OSCILLATION DAMPERS
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand
p0333 A78-34161
OSCILLATIONS
NT HARMONIC OSCILLATION
NT NONSTABILIZED OSCILLATION
NT PRESSURE OSCILLATIONS
NT SELF OSCILLATION
NT TRANSVERSE OSCILLATION
NT WING OSCILLATIONS
Phugoid characteristics of a YF-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
Water-tunnel experiments on an oscillating airfoil at RE equals 21,000
[NASA-TM-78446] p0253 N78-19058
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
Dynamic stall of an oscillating airfoil
p0346 N78-22055
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
OSCILLATORS
NT CATHODE RAY TUBES
NT CRYSTAL OSCILLATORS
NT GAS DISCHARGE TUBES
NT MICROWAVE OSCILLATORS
OSCILLOGRAMS
U OSCILLOGRAPHS
OSCILLOGRAPHS
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy --- jet engine compressor blades
p0444 N78-26468
OUTLET FLOW
A new technique for controlling the exit flow periodicity of supersonic cascades --- throttling with slotted tailboard
p0045 N78-11330
OUTPUT
NT LASER OUTPUTS
OXIDATION
Oxidation products of fuels obtained by hydrogenation processes

p0334 A78-34319
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
OXIDATION RESISTANCE
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025
OXIDES
NT CARBON DIOXIDE
NT CARBON MONOXIDE
NT NITRIC OXIDE
NT NITROGEN OXIDES
NT PEROXIDES
NT PLUTONIUM OXIDES
NT ZIRCONIUM OXIDES
OXIDIZERS
NT LIQUID OXYGEN
OXYGEN
NT LIQUID OXYGEN
NT OZONE
OZONE
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
[NASA-TM-78983] p0558 N78-31061
OZONOMETRY
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618
OZONOSPHERE
Photochemistry and dynamics of the ozone layer
p0381 A78-38766

P

P-3 AIRCRAFT
A study of the P-3C Omega navigation system
[AD-A044474] p0084 N78-12064
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
P-1127 AIRCRAFT
Planning and procedures for aircraft demonstrations - V/STOL aircraft
p0380 A78-38749
PACIFIC OCEAN
The Omega radionavigation system comes to the Pacific Ocean area
p0525 A78-49660
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
PACKAGES
NT INSTRUMENT PACKAGES
PACKAGING
NT ELECTRONIC PACKAGING
PAINTS
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284
PANEL FLUTTER
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Density of motions in the flutter of infinite plates
p0594 A78-52932
PANELS
NT CURVED PANELS
NT RECTANGULAR PANELS
NT WING PANELS
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Paneling techniques for use with the VORLAX computer program
[NASA-CR-145364] p0405 N78-25054
Recess fasteners
[AD-A053221] p0443 N78-26449
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28484
PARABOLIC ANTENNAS
Portable earth station antenna study system
[AD-A054791] p0614 N78-32321
PARACHUTE DESCENT
The aerodynamic behaviour of fully inflated parachutes
p0275 A78-29215
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
Operator work capacity during parachutist free-fall
p0517 A78-47978
Compressibility effects on parachute transient pressures
p0591 A78-51950
B77 flight test data processing --- aerodynamic forces, coefficients, and stability during parachute and drop tests
[SAND-77-8010] p0082 N78-12049
From space on a parachute
[NASA-TM-75577] p0631 N78-33140
PARACHUTE FABRICS
The theory of fabric porosity as applied to parachutes in incompressible flow
p0586 A78-51466
PARACHUTES
NT RECOVERY PARACHUTES
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[AIAA 78-785] p0295 A78-32343
Evaluation of slimpack style parachute in CT4A airtrainer aircraft
[AD-A047083] p0195 N78-16024
Parachutes and decelerators, volume 2. A bibliography with abstracts
[NTIS/PS-78/0320] p0406 N78-25067
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
PARACHUTING
U PARACHUTE DESCENT
PARAGLIDERS
NT FLEXIBLE WINGS
PARALLEL FLOW
NT PIPE FLOW
NT THREE DIMENSIONAL FLOW
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
PARALLEL PROCESSING (COMPUTERS)
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
Solution of multitarget, multisensor tracking problems on the Illiac IV parallel processor
p0113 A78-18063
PARALLEL STRIP LINES
U MICROSTRIP TRANSMISSION LINES
PARAMETERIZATION
Effects of control inputs on the estimation of stability and control parameters of a light airplane

[NASA-TP-1043] p0099 N78-13071
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft
[NASA-TM-73816] p0102 N78-13854
PARTICLE ACCELERATORS
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
PARTICLE BEAMS
NT ELECTRON BEAMS
NT NEUTRON BEAMS
Key beam weapons tests slated --- for aircraft carrier particle beam defense against cruise missiles
p0597 A78-53238
PARTICLE COLLISIONS
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
PARTICLE DENSITY (CONCENTRATION)
NT ELECTRON DENSITY (CONCENTRATION)
PARTICLE DIFFUSION
Reaction diffusion in the NiCrAl and CoCrAl systems
p0597 A78-53063
PARTICLE EMISSION
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter
[AD-A039735] p0311 N78-20636
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
Non-extractive electro-optical measurement of jet-engine emissions
[AD-A056783] p0628 N78-33105
PARTICLE MOTION
Motion of the solid phase of an aerosol at large Reynolds numbers
p0334 A78-34421
Mathematical analysis of impact erosion --- of supersonic flight vehicles
p0588 A78-51711
PARTICLE SIZE DISTRIBUTION
The dynamics of non spherical particles --- aerodynamic translational mobility of cubes and cylinders
[AD-A047144] p0256 N78-19080
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
PARTICLE TRAJECTORIES
Possibilities of phase separation in supersonic two-phase flows
p0426 A78-42630
The dynamics of non spherical particles --- aerodynamic translational mobility of cubes and cylinders
[AD-A047144] p0256 N78-19080
PARTICLES
NT AEROSOLS
NT ELECTRON BEAMS
NT FOG
NT LIGHT BEAMS
NT MIST
NT POWDER (PARTICLES)
NT SOOT
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
PARTICULATE FILTERS
U FLUID FILTERS
PARTICULATE SAMPLING
Turbine engine particulate emission characterization, phase 2
[AD-A057370] p0628 N78-33106
PASSENGER AIRCRAFT
NT A-300 AIRCRAFT
NT BO-105 HELICOPTER
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT BOEING 747 AIRCRAFT
NT CH-47 HELICOPTER
NT CV-340 AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 10 AIRCRAFT
NT DO-28 AIRCRAFT
NT EUROPEAN AIRBUS
NT F-27 AIRCRAFT
NT F-28 TRANSPORT AIRCRAFT
NT H-53 HELICOPTER
NT HPB-320 AIRCRAFT
NT IL-62 AIRCRAFT
NT L-1011 AIRCRAFT
NT YAK 40 AIRCRAFT
The Dash 7 - An aircraft for today's environment
p0004 A78-12213
Technical exploitation of aircraft /2nd revised and enlarged edition/ --- Russian book
p0014 A78-12606
20 years IL-18 --- aircraft design features, capabilities and applications
p0050 A78-13497
Protective equipment for cargo transport in passenger cabins
p0051 A78-13501
The next engine decision - Why it takes so long --- for passenger airliners
p0058 A78-15090
Radiation safety in high-altitude air traffic
p0071 A78-16184
Why fly supersonically --- flight time reduction vs fuel consumption and low payload
p0109 A78-17889
Airports for short takeoff and landing
p0178 A78-23471
Future development of commercial aircraft: Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
Special problems in the development of the propulsion system for an over-the-wing engine configuration
[DGLR PAPER 77-046] p0190 A78-24435
Ride quality flight testing
p0226 A78-26795
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis --- Russian book
p0282 A78-30175
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-31307
STOL system fuel savings - Ground and air
p0287 A78-31312
Ride technology applications to large passenger aircraft
p0331 A78-33443
Type measurements of aircraft interior sound pressure levels in cruise
[SAE ARP 1323] p0471 A78-44689
Airliner numbers game - Does it add up --- political and technological aspects of international aircraft industries
p0525 A78-49524
European air transport up to the year 2000 /Lord Douglas of Kirtleside Lecture/
p0587 A78-51520
Optimization of the structure of the LOT Polish Airlines fleet for the requirements of international passenger transport
p0588 A78-51598
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Boeing launches the 767
p0591 A78-52244
Determination of the flight equipment maintenance costs of commuter airlines
[NASA-CR-152069] p0213 N78-17931
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
Energy savings. An aircraft constructor's viewpoint
[AAAF-NT-77-24] p0397 N78-24127
An operator's viewpoint: How to reduce the fuel consumption in aeronautical maintenance
[AAAF-NT-77-26] p0397 N78-24129
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096

Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
The technology assessment of LTA aircraft systems --- hybrid airships for passenger and cargo transportation
[NASA-TM-75535] p0603 N78-32043
PASSENGERS
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Tandem-queue algorithm for airport user flows
p0284 A78-30677
Concorde - Ride quality and passenger reactions
p0418 A78-41166
Mitsubishi Passenger Transfer Vehicle Model 150
p0429 A78-43298
Model of aircraft passenger acceptance
p0526 A78-49684
Improved passenger flow through simulation
p0570 A78-50437
PATTERN RECOGNITION
Pattern recognition as an aid to radar navigation
p0530 A78-49855
Advanced pattern matching for navigation and guidance
p0539 A78-49998
A learning flight control system for the F8-DFBW aircraft --- Digital Fly-By-Wire
[AIAA 78-1288] p0542 A78-50195
PAVEMENTS
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
Analysis of pavements designed by CBR equation --- California Bearing Ratio for airfield pavements
p0426 A78-42856
Quick bearing strength tests for concrete pavements
p0469 A78-44224
Airfield pavement load evaluation - An international overview
p0525 A78-49676
Proposed load evaluation system for U.S. Air Force --- of airfield pavement
p0526 A78-49677
Transport Canada airfield pavement load evaluation
p0526 A78-49678
French procedures for airfield pavement load evaluation
p0526 A78-49679
Airfield pavement evaluation - The airline view
p0526 A78-49680
Airfield pavement evaluation - FAA viewpoint
p0526 A78-49681
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
Research in airport pavements --- conference
[AD-A043179] p0031 N78-10120
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
Porous friction surface runway at USNAS Dallas, Texas
[AD-A042181] p0043 N78-11124
Analysis of permanent deformations of flexible airport pavements
[AD-A044269/9] p0099 N78-13079
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
Nondestructive pavement evaluation
[AD-A052707] p0400 N78-24159
Freeze-thaw tests of liquid deicing chemicals on selected pavement materials
[AD-A051771] p0493 N78-28279
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111
PAYLOADS
The use of long-duration balloons for scientific research
p0113 A78-18184
Distributed load aircraft concepts
[AIAA PAPER 78-100] p0172 A78-22573
Dynamic stability of a helicopter carrying a suspended payload
[AIAA 78-1335] p0483 A78-46533
Stability of a helicopter carrying an underslung load
p0524 A78-49398
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
PDP COMPUTERS
NT PDP 8 COMPUTER
PDP 8 COMPUTER
Modifications to FALSTAFF that were required for operation on a 16 K PDP-8e minicomputer
[LTR-ST-899] p0202 N78-16392
PENETRATION
The ground-attack/penetration model: A Monte Carlo simulation model to assess the survivability and to evaluate tactics for low-altitude military missions in an environment of groundbased air defence systems
p0431 N78-26051
PENNSYLVANIA
Aircraft accident report: Commonwealth of Pennsylvania, Piper PA-31T, N631PT, Bressler, Pennsylvania, 14 February 1977
[NTISUB/D/104-001] p0451 N78-27095
PERCEPTION
NT MOTION PERCEPTION
NT PROPRIOCEPTION
NT SENSORY PERCEPTION
NT SOUND LOCALIZATION
NT SPACE PERCEPTION
NT VISUAL PERCEPTION
PERFECT GAS
U IDEAL GAS
PERFORATED PLATES
Analytical representation of the initial quality of fastener holes --- for aircraft structures
p0217 A78-25180
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
A major refurbishing program for the NAE 5-ft. x 5-ft. blowdown wind tunnel
p0415 A78-40725
PERFORMANCE
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
PERFORMANCE PREDICTION
NT PREDICTION ANALYSIS TECHNIQUES
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
Controller productivity in the pre-data link era
p0064 A78-15635
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375

The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
The prediction of the performance of low pressure-ratio thrust-augmenter ejectors
[AIAA PAPER 78-145] p0159 A78-20704
The prediction of two-dimensional airfoil stall progression
[AIAA PAPER 78-155] p0160 A78-20709
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
Some contributions to aerodynamic theory for vertical-axis wind turbines
p0327 A78-32534
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
A high-power switching network for a dual-mode antenna --- for airborne transmitter application
p0383 A78-38844
Loss prediction in axial compressors - A bibliographic study
[ONERA, TP NO. 1978-65] p0383 A78-38892
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
A method of predicting stress corrosion cracking
p0468 A78-44105
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor --- in aircraft design
p0481 A78-46354
Analysis of optimal turning maneuvers in the vertical plane --- for high thrust aircraft
[AIAA 78-1333] p0482 A78-46531
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
Operational regularity in air transport
p0525 A78-49449
Performance of the Vortex-Controlled Diffuser /VCD/ in an annular combustor flowpath
p0572 A78-50574
Broadband noise in axial-fan blade cascade
p0579 A78-50650
Pilot evaluation of an advanced hingeless rotor XY-15 simulation
[NASA-CR-152034] p0022 N78-10046
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 1: Validation and sensitivity study
[AD-A045034] p0085 N78-12077
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
Internal performance predictions for Langley scramjet engine module
[NASA-TM-X-74038] p0208 N78-17057
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
High temperature problems in gas turbine engines
[AGARD-CP-229] p0319 N78-21118
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
Performance Prediction Methods
[AGARD-CP-242] p0434 N78-26074
Performance methods for aircraft and missiles
p0434 N78-26075
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076
Prediction of off-design performance of turbojet and turbofan engines
p0434 N78-26077
Performance implications of some recent advances in weapon carriage research
p0435 N78-26081
VTOL performance estimation for jet lift aircraft
p0435 N78-26082
Comparison of estimated and flight data for rolling take-off and transition of a VTOL aircraft
p0435 N78-26083
A computerized aircraft performance system
p0435 N78-26084
Performance predictions of Marcell Dassault-Breguet Aviation aircraft
p0435 N78-26085
Flight test verification of F-15 performance predictions
p0436 N78-26090
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight (Airbus and Concorde)
p0436 N78-26093
The theoretical performance of a straight-bladed, vertical axis wind turbine
[ATN-7802] p0445 N78-26561
JT9D jet engine performance deterioration
p0446 N78-27050
Engine component improvement: JT8D and JT9D performance improvements
p0447 N78-27052
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104
Avionics performance analysis: A historical review and a current assessment of flight instrumentation and control systems in civil aviation
[NASA-CR-145378] p0610 N78-32094
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089

PERFORMANCE TESTS

Flight testing of radars
p0054 A78-14933
Test pilot report on the angle rate bombing system
p0055 A78-14946
Life cycle testing for avionics development
p0060 A78-15557
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics

p0064 A78-15636
Clearance of new stores for military aircraft - An overview of the techniques used
p0074 A78-16597
F-16 progress in performance flight testing using an inertial navigation unit
p0123 A78-19427
F-4E austere heads-up display/gunsight evaluation
p0124 A78-19434
Wright-Patterson Air Force Base laser tracker
p0124 A78-19437
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DET-33] p0135 A78-20598
Gas turbine module performance analysis
[SAE PAPER 770992] p0180 A78-23828
Flight testing an 8000 psi Lightweight Hydraulic System
[SAE PAPER 771007] p0181 A78-23839
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
Investigating the efficiency of gas turbines in off-design operation --- multistage experimental data
p0377 A78-37860
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Minimum safe performance over speed warning instruments --- for subsonic aircraft
[SAE AS 8007] p0471 A78-44683
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
Design and verification of a turbofan Swirl augmentor
p0572 A78-50564
Recent status on research and development of FJR 710 turbofan engine --- for subsonic civil transport aircraft
p0573 A78-50577
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
Study to develop improved fire resistant aircraft passenger seat materials, phase 1
[NASA-CR-152056] p0036 N78-11042
Some current problems in simulator design, testing and use
[AD-A043240] p0044 N78-11127
Design considerations in mechanical face seals for improved performance. 1: Basic configurations
[NASA-TM-73735] p0101 N78-13439
Performance evaluation of thin layer thermoelectric device
[AD-A045361] p0103 N78-13918
Microwave scanning beam landing system, ground station: Performance test report. Volume 1: Executive summary
[NASA-CR-151582] p0139 N78-14021
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
Test operations procedures physical characteristics aviation material
[AD-A053196] p0408 N78-25086
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095
LACV-30 test and demonstration report --- air cushion vehicles
[AD-A053610] p0492 N78-28276
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
Aircraft defogging and defrosting (transparent area)
[AD-A056976] p0626 N78-33094

PERIODIC VARIATIONS
Investigations on unsteady pressure distribution measurements in rotating systems
[DLR-FB-77-43] p0566 N78-31135

PERIODICITY
U PERIODIC VARIATIONS

PERIPHERAL EQUIPMENT (COMPUTERS)
NT COMPUTER STORAGE DEVICES
NT CONSOLES
Peripheral processors for high-speed simulation --- helicopter cockpit simulator
p0052 A78-14063

PEROXIDES
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319

PERSONNEL
NT AIR TRAFFIC CONTROLLERS (PERSONNEL)
NT AIRCRAFT PILOTS
NT FLIGHT CREWS
NT FLYING PERSONNEL
NT TEST PILOTS

PERSONNEL MANAGEMENT
Controller productivity in the pre-data link era
p0064 A78-15635

PERTURBATION
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328

PERTURBATION THEORY
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
Use of the singular perturbation method to investigate automatic control systems --- for automatic pilot
p0163 A78-20802
A singular perturbation analysis of optimal aerodynamic and thrust magnitude control
p0183 A78-23900
Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
Small perturbation theory for supersonic jets
[AIAA PAPER 78-1151] p0421 A78-41851
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external stores
[DLR-FB-77-21] p0238 N78-18014
A perturbation method for predicting amplitudes of nonlinear wheel shimmy
p0325 N78-21464
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064

Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
PETROLEUM
U CRUDE OIL
PETROLEUM PRODUCTS
NT DIESEL FUELS
NT GREASES
NT LUBRICATING OILS
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
PFM (MODULATION)
U PULSE FREQUENCY MODULATION
PHANTOM AIRCRAFT
NT F-4 AIRCRAFT
PHASE CONTROL
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
PHASE ERROR
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
PHASE LOCKED SYSTEMS
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068
PHASE MODULATION
NT PHASE SHIFT KEYING
PHASE SHIFT KEYING
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
Flight tests of digital data transmission --- MSK - a quadrature PSK system
p0285 A78-31050
PHASE TRANSFORMATIONS
NT COAL LIQUEFACTION
NT EVAPORATION
NT MELTING
NT TRANSPIRATION
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys
p0427 A78-43015
The promise of eutectics for aircraft turbines
[NASA-TM-73714] p0028 N78-10098
PHASED ARRAYS
Ku Band linear phased array
p0003 A78-11821
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040
The ABEILLE electronic scanning antenna --- for fighter aircraft fire control radar
p0338 A78-35050
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
PHENOLS
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
PHOSPHORUS
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
PHOTOCHEMICAL REACTIONS
Simulation of airport air quality by box photochemical and Gaussian models
p0216 A78-25033
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816
PHOTOCHEMISTRY
U PHOTOCHEMICAL REACTIONS
PHOTOCURRENTS
U ELECTRIC CURRENT
PHOTOELASTIC ANALYSIS
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
Aircraft engine design - Development through lessons learned
p0335 A78-34641
PHOTOELASTIC STRESS MEASUREMENT
U PHOTOELASTIC ANALYSIS
PHOTOELECTROMAGNETIC DETECTORS
U RADIATION MEASURING INSTRUMENTS
PHOTOGRAMMETRY
Geometric restitution of single coverage aircraft multispectral scanner data
p0280 A78-29854
PHOTOGRAPHIC EQUIPMENT
NT CAMERAS
NT TELEVISION CAMERAS
Elastic deformations of rapidly-rotating prismatic mirrors
p0168 A78-21374
PHOTOGRAPHIC MEASUREMENT
NT PHOTOGRAMMETRY
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
PHOTOGRAPHY
NT AERIAL PHOTOGRAPHY
NT COLOR PHOTOGRAPHY
NT FRACTOGRAPHY
NT HOLOGRAPHY
NT INFRARED IMAGERY
NT INFRARED PHOTOGRAPHY
NT MULTISPECTRAL PHOTOGRAPHY
NT RADAR PHOTOGRAPHY
NT SATELLITE-BORNE PHOTOGRAPHY
NT SCHLIEREN PHOTOGRAPHY
PHOTOLUMINESCENCE
NT X RAY FLUORESCENCE
PHOTON BEAMS
NT LIGHT BEAMS
PHOTONIC PROPULSION
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
PHOTONS
NT LIGHT BEAMS
PHOTOREDUCTION
U PHOTOCHEMICAL REACTIONS
PHOTOSENSORS
U RADIATION MEASURING INSTRUMENTS
PHOTOTHERMOTROPISM
U TEMPERATURE EFFECTS
PHUGOID OSCILLATIONS
U OSCILLATIONS
U PITCH (INCLINATION)
PHYSICAL PROPERTIES
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594
Physical characteristics: Aviation materiel --- Army test facilities and equipment
[AD-A055803] p0610 N78-32093
PHYSIOLOGICAL TESTS
Pool fire induced cockpit degradation
p0050 A78-13415
PICKOFFS
U SENSORS
PICKUPS
U SENSORS
PIEZOELECTRIC TRANSDUCERS
Piezoelectric polymer transducers for detection of structural defects in aircraft
[AD-A055729] p0621 N78-32903
PILOT ERROR
Systems analysis of safety in aviation. I.

p0178 A78-23470
Optimal flight control synthesis via pilot modeling
[AIAA 78-1286] p0541 A78-50193
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
PILOT PERFORMANCE
The role of cockpit simulators in the integration of pilot/controller ATC system related avionics and procedures
[AIAA 77-1516] p0010 A78-12284
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
Air Force electronically generated symbology standardization
p0067 A78-15670
Aircraft display design using analytical pilot models
p0113 A78-18068
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791
F-15/16 canopy off testing
p0233 A78-28453
Current problems of flight simulators for research
p0275 A78-29214
Aircraft and helicopter cockpit noise
p0278 A78-29673
Systematic analysis of safety in aviation. II
p0278 A78-29674
Digital computer program maneuver pilot
p0290 A78-31946
Ergonomics in commercial aircraft landing
p0371 A78-36621
Method of calculating the landmark density of aeronautical charts
p0475 A78-45124
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
Piloting and control systems for airplanes and helicopters --- Russian book
p0485 A78-46565
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
Microwave landing system utilization and conventional avionics
[AD-A044297] p0083 N78-12055
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
The effects of eliminating minor graduations on dial reading performance
[AD-A046709] p0150 N78-15039
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078
A comparison of integrated and conventional cockpit warning systems --- pilot performance and reaction time in man machine systems
[AD-A048670] p0239 N78-18022
Analytical study of ride smoothing benefits of control system configurations optimized for pilot handling qualities
[NASA-TP-1148] p0246 N78-18076
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
Problems pilots face involving wind shear
p0268 N78-19722
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
An approach to the determination of aircraft handling qualities using pilot transfer functions
p0356 N78-23018
Evaluation of jet 2 inch standby flight instrument system
[AD-A051798] p0361 N78-23087
Airline pilot scanning behavior during approaches and landing in a Boeing 737 simulator
p0432 N78-26064
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
Effects of dynamic aeroelasticity on handling qualities and pilot rating
p0560 N78-31084
A theory for longitudinal short-period pilot induced oscillations
[AD-A056982] p0630 N78-33120
PILOT TRAINING
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
The Dual-Flight-Simulator as an aid for a government mission specialist
[DGLR PAPER 77-079] p0290 A78-31949
Air-to-air combat simulation
p0510 A78-47868
Effect of performance objectives on the design and cost of future USAF pilot training aircraft
[AIAA PAPER 78-1498] p0515 A78-47938
A flight simulation high order language study
p0536 A78-49957
Visual flight simulator for the investigation of the learning process during aircraft landing
p0569 A78-50302
Stability and control flight test techniques, volume 2 --- pilot training handbook
[AD-A042593] p0030 N78-10113
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045
Instructor pilot's role in simulation training, phase 2
[AD-A047919] p0212 N78-17082
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118
Evaluation of jet 2 inch standby flight instrument system
[AD-A051798] p0361 N78-23087
PILOTLESS AIRCRAFT
NT DRONE AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
NT TARGET DRONE AIRCRAFT
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104
PILOTS (PERSONNEL)
NT AIRCRAFT PILOTS
NT TEST PILOTS
PIPE FLOW
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441
PIPELINES
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
PIPER AIRCRAFT
Aircraft accident report: Commonwealth of

Pennsylvania, Piper PA-31T, N631PT, Bressler, Pennsylvania, 14 February 1977
[NTISUB/D/104-001] p0451 N78-27095
PISTON ENGINES
NT DIESEL ENGINES
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Engines for small propeller-driven RPVs, report of Sub-Group A of AGARD Working Group on Propulsion and Power Supplies for unmanned vehicles, volume 1
[AGARD-AR-101-VOL-1] p0151 N78-15054
Analysis of a high speed ring valve system for a single cylinder reciprocating compressor
p0633 N78-33442
PITCH (INCLINATION)
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
Measurement of the pitch damping on two AGARD B models in the FFA S4 and S5 wind tunnels
[FFA-AU-556] p0438 N78-26112
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
Effects of dynamic aeroelasticity on handling qualities and pilot rating
p0560 N78-31084
A theory for longitudinal short-period pilot induced oscillations
[AD-A056982] p0630 N78-33120
PITCH ANGLES
U PITCH (INCLINATION)
PITCH ATTITUDE CONTROL
U LONGITUDINAL CONTROL
PITCHING MOMENTS
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
PITOT TUBES
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079
PLANAR STRUCTURES
A Mach line panel method for computing the linearized supersonic flow over planar wings
[NASA-CR-152126] p0450 N78-27087
PLANE WAVES
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
PLANETARY ATMOSPHERES
NT MARS ATMOSPHERE
PLANETARY ENTRY
U ATMOSPHERIC ENTRY
PLANETARY ENVIRONMENTS
NT MARS ATMOSPHERE
PLANFORMS
NT ARROW WINGS
NT CARET WINGS
NT DELTA WINGS
NT INFINITE SPAN WINGS
NT RECTANGULAR PANELS
NT RECTANGULAR PLANFORMS
NT RECTANGULAR PLATES
NT RECTANGULAR WINGS
NT SWEPT FORWARD WINGS
NT SWEPTBACK WINGS
NT TRAPEZOIDAL WINGS
NT VARIABLE SWEEP WINGS
NT WING PLANFORMS
Flow past nonconical wings with separation
p0377 A78-37775
PLANNING
NT AIRPORT PLANNING
NT MANAGEMENT PLANNING
NT MISSION PLANNING
NT PRODUCTION PLANNING
NT PROJECT PLANNING
NT REGIONAL PLANNING
NT URBAN PLANNING
PLANTS (INDUSTRIES)
U INDUSTRIAL PLANTS
PLASMA ARC WELDING
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
PLASMA DIAGNOSTICS
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
PLASMA DYNAMICS
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
PLASMA GENERATORS
NT TOKAMAK DEVICES
PLASMA INSTABILITY
U MAGNETOHYDRODYNAMIC STABILITY
PLASMA PROBES
NT ELECTROSTATIC PROBES
PLASMA STABILITY
U MAGNETOHYDRODYNAMIC STABILITY
PLASTIC AIRCRAFT STRUCTURES
Quiet revolution - An update on carbon fibres for aircraft structures
p0070 A78-15952
Selecting plastics for aircraft applications
p0232 A78-28374
Sailplanes of carbon-fiber construction
p0382 A78-38804
Application of modern methods in civil aircraft construction
p0382 A78-38808
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
Material selection for the Tornado taileron
p0383 A78-38811
PLASTIC COATINGS
Water borne coatings
p0069 A78-15852
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
PLASTIC DEFORMATION
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
PLASTIC FILMS
U POLYMERIC FILMS
PLASTIC MATERIALS
U PLASTICS
PLASTIC PROPERTIES
NT ELASTOPLASTICITY
PLASTIC TAPES
Adhesion of erosion resistant tapes on several surface configurations

[FOK-R-2132] p0442 N78-26220
PLASTIC YIELDING
U PLASTIC DEFORMATION
PLASTICS
NT CARBON FIBER REINFORCED PLASTICS
NT EPOXY RESINS
NT POLYETHYLENES
NT REINFORCED PLASTICS
NT THERMOPLASTIC RESINS
Basic problem of control of the motion of a non-Newtonian fluid in a gap --- roll forming of aircraft plastics
p0292 A78-32257
AIC/50/ values for some polymeric materials --- Apparent Lethal Concentration fire toxicity
p0371 A78-36596
PLASTISOLS
NT SMOKE
PLATE THEORY
Transmission of a concentrated force to a plate
p0129 A78-19726
PLATES
Brake-plates for aeroplanes
[AD-A045932] p0143 N78-14150
An experimental study to determine the reduction in ultimate bending moment of a composite plate due to an internal delamination
[AD-A052662] p0411 N78-25466
PLATES (STRUCTURAL MEMBERS)
NT ANNULAR PLATES
NT CORRUGATED PLATES
NT ELASTIC PLATES
NT PERFORATED PLATES
NT POROUS PLATES
NT REINFORCED PLATES
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
PLATING
NT ELECTROPLATING
PLENUM CHAMBERS
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
PLOTTING
Plotit-method of interactively plotting input data for the vorlax computer program --- computerized aircraft configuration design
[NASA-CR-158896] p0495 N78-28830
PLUMES
NT ROCKET EXHAUST
Airborne sampling system for plume monitoring
p0418 A78-41280
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134
PLUTONIUM COMPOUNDS
NT PLUTONIUM OXIDES
PLUTONIUM OXIDES
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
PLUVIOGRAPHS
U RECORDING INSTRUMENTS
PNEUMATIC CONTROL
An investigation on thrust vector control --- using a pneumatic technique
[DLR-IB-151-76/15] p0043 N78-11118
PNEUMATIC EQUIPMENT
NT GAS VALVES
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
Optimum design of a landing gear shock absorber system
p0224 A78-26480
Pneumatic ground power supplies for starting aircraft
[SAE AIR 944A] p0472 A78-44693
The effects of cam and nozzle configurations on the performance of a circulation control rotor pneumatic valving system
[AD-A050494] p0352 N78-22103
PNEUMATIC PROBES
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
PNEUMATIC RESET
U PNEUMATIC CONTROL
PODS (EXTERNAL STORES)
A test using simulated mission profile environments --- Airborne Instrumentation Subsystem pod reliability
p0291 A78-32126
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
POINT MATCHING METHOD (MATHEMATICS)
U BOUNDARY VALUE PROBLEMS
POINTERS
U DIALS
POINTING CONTROL SYSTEMS
Base motion sensitivity analysis for airborne ILIC pointing and tracking systems --- In-Loop Integration Control
p0063 A78-15593
Modular target acquisition and designation systems
p0536 A78-49954
POISEUILLE FLOW
U LAMINAR FLOW
POISONS
NT URETHANES
POISSON PROCESS
U STOCHASTIC PROCESSES
POLAND
Some problems of exploitation of jet turbine aircraft engines of Lot Polish Air Lines
[AD-A046221] p0151 N78-15048
POLAR REGIONS
NT ARCTIC REGIONS
POLARIZATION (SPIN ALIGNMENT)
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
POLARIZED ELECTROMAGNETIC RADIATION
Multipath fading simulation model and full-scale results --- polarized electromagnetic signal transmission
p0221 A78-25879
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
POLARIZED RADIATION
NT POLARIZED ELECTROMAGNETIC RADIATION
POLICIES
NT ENERGY POLICY
NT PROCUREMENT POLICY
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624
POLLUTANTS
U CONTAMINANTS
POLLUTION
NT AIR POLLUTION
NT ENVIRONMENT POLLUTION
NT NOISE POLLUTION
NT WATER POLLUTION
POLLUTION CONTROL
Aircraft noise control
p0015 A78-12814
Status of aircraft noise control in Israel
p0015 A78-12823
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
Preliminary QCSEE program - Test results --- Quiet Clean Short-haul Experimental Engine
[SAE PAPER 771008] p0181 A78-23840
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
Status report on aircraft noise certification
p0340 A78-35652
State-of-the-art of turbofan engine noise control
p0340 A78-35658

Some advances in design techniques for low noise operation of propellers and fans
p0340 A78-35659
The catalytic combustor - An approach to cleaner combustion --- by reaction control in gas turbine engines
p0416 A78-40820
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Reduction of aircraft gas turbine engine pollutant emissions - A status report
p0480 A78-45429
Gas turbine engine emissions - Problems, progress and future
p0524 A78-49336
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
Development of the experimental gas turbine bus
p0575 A78-50601
Current state of the law in aircraft noise pollution control
p0583 A78-51130
Aircraft engine emissions --- conference
[NASA-CP-2021] p0038 N78-11063
Environmental protection agency aircraft emissions standards
p0038 N78-11064
Emissions reduction technology program
p0039 N78-11065
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
Pollution reduction technology program for turboprop engines
p0039 N78-11069
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070
Summary of emissions reduction technology programs
p0039 N78-11071
Emissions control for ground power gas turbines
p0039 N78-11072
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Global atmospheric sampling program
p0040 N78-11076
Stratospheric cruise emission reduction program
p0040 N78-11077
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Laboratory studies of lean combustion
p0040 N78-11079
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
Augmentor emissions reduction technology program --- for turbofan engines
[NASA-CR-135215] p0097 N78-13057
Reduction of aircraft gas turbine engine pollutant emissions
[NASA-TM-78870] p0351 N78-22098
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Gas turbine engine emission reduction technology program
p0447 N78-27058
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
Helicopter external noise requirements: FAA perspective
p0618 N78-32817
Helicopter noise regulations: An industry perspective
p0618 N78-32818
Noise requirements from a military point of view
p0619 N78-32819
The impact of urban operations on helicopter noise requirements
p0619 N78-32820
Theoretical models of helicopter rotor noise
p0619 N78-32822
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104

POLLUTION MONITORING
New airport in Gothenburg - How the noise problems have been handled
p0015 A78-12822
Design and operation of an airborne air quality measurement system
p0107 A78-17575
Results of Concorde monitoring
p0340 A78-35655
Airport noise monitoring
p0341 A78-35663
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
Subisokinetic sampling errors for aircraft turbine engine smoke probes
p0379 A78-38575
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
Airborne sampling system for plume monitoring
p0418 A78-41280
Concorde emissions at Dulles International Airport - Results of measurements
p0597 A78-53050

POLYAMIDE RESINS
NT KEVLAR (TRADEMARK)
POLYATOMIC GASES
NT DIATOMIC GASES
POLYETHYLENES
Scientific ballooning in India --- for stratospheric cosmic ray measurements
p0113 A78-18182

POLYGONS
NT TRIANGLES
POLYHEDRONS
NT CUBES (MATHEMATICS)
NT PYRAMIDS
POLYIMIDE RESINS
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] p0457 N78-27184
POLYMER MATRIX COMPOSITE MATERIALS
The prospects for composites based on boron fibers
[NASA-TM-75305] p0457 N78-27185
POLYMERIC FILMS
Thermal flux protection for aircraft
p0072 A78-16267
Scientific ballooning in India --- for stratospheric cosmic ray measurements
p0113 A78-18182
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513

POLYNOMIALS
NT BINOMIALS
NT HERMITIAN POLYNOMIAL
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930

POLYURETHANE FOAM
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
Electrostatic charging of JP-4 fuel on polyurethane foams
[AD-A053831] p0457 N78-27278

Material evaluation of polyurethane foam, 0.05 g/cm 3 density
[BDX-613-1836-REV] p0567 N78-31249
POLYURETHANE RESINS
In-service performance of polyurethane and fluorocarbon rain erosion resistant radome coatings
p0219 A78-25205
Epoxy and polyurethane paint compositions for agricultural airplanes
[AD-A045914] p0144 N78-14173
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
POREs
U POROSITY
POROSITY
The theory of fabric porosity as applied to parachutes in incompressible flow
p0586 A78-51466
POROUS MATERIALS
Some problems of GTE blade transpiration cooling
p0049 A78-13166
Application of porous materials for laminar flow control
p0449 N78-27072
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371
POROUS PLATES
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
POROUS WALLS
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
Unsteady incompressible flow past thin porous airfoils
p0427 A78-42918
Induction of subsonic wind tunnels with slight perforation
p0519 A78-48250
PORTABLE EQUIPMENT
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-PRC-10113-1] p0265 N78-19166
Portable earth station antenna study system
[AD-A054791] p0614 N78-32321
POSITION (LOCATION)
Observational computation in the case of redundant measurements --- for position sensor data in radio navigation systems
p0176 A78-23133
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
The Navstar Global Positioning System /GPS/
p0594 A78-52952
Satellites for position determination
p0601 A78-53911
Uncertainties in airport cost analysis and their effect on site selection
p0089 N78-12104
Cockpit displayed traffic information study, part 2
[NASA-CR-156115] p0304 N78-20102
A multi-sensor implementation for navigation, position location, position update, reconnaissance, and weapon delivery: AN/ARN-101(V)
p0315 N78-21082
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078
POSITION ERRORS
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
The evaluation of the operational characteristics of navigation systems
p0070 A78-15918
Comparisons of tabular and observed Omega corrections through use of spectral analysis techniques
p0070 A78-15920
A simplification in position determination with the Omega system
p0070 A78-15921
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
Results of the NASA/MARAD L-band satellite navigation experiment
p0375 A78-37525
Investigation of the accuracy of one-way range measurements --- for radio navigation systems
p0476 A78-45158
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
POSITION INDICATORS
NT RADIO DIRECTION FINDERS
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
Twoway - A position and orientation measurement system --- helicopter/VTOL landing aid application
p0525 A78-49661
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Analysis of single and double coverage aircraft multispectral scanner arrays for positional data
p0267 N78-19553
POSITIONING
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
POSITIONING DEVICES (MACHINERY)
NT BOOMS (EQUIPMENT)
POTENTIAL ENERGY
NT ELECTRIC POTENTIAL
POTENTIAL FLOW
Computation of transonic potential flows in turbomachinery
p0011 A78-12293
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
Aerodynamic characteristics of a system of airfoil profiles
p0132 A78-20275
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
The prediction of two-dimensional airfoil stall progression
[AIAA PAPER 78-155] p0160 A78-20709
An analysis method for the viscous flow over circulation-controlled airfoils

[AIAA PAPER 78-157] p0160 A78-20710
High-frequency approximation for a nonlifting thin airfoil in subsonic flow
[AIAA PAPER 78-226] p0161 A78-20755
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils
[AIAA PAPER 78-11] p0171 A78-22553
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
Potential flow around axisymmetric bodies - Direct and inverse problems
p0223 A78-26230
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Finite-element analysis of three-dimensional potential flow in turbomachines
p0416 A78-40831
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
Calculation of cascade flow by means of spline fit singularity
p0576 A78-50606
Irrotational flow around a spherical segment --- aerodynamic brakes application
p0588 A78-51688
Computation of two-dimensional potential flow using elementary vortex distributions
p0590 A78-51948
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
Theoretical aspects of dromedaryfoil
[AD-A047150] p0194 N78-16023
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
A mean camberline singularity method for two-dimensional steady and oscillatory aerofoils and control surfaces in inviscid incompressible flow
[ARC-CP-1391] p0545 N78-30066
POTENTIAL THEORY
Variational principles for the transonic airfoil problem
p0285 A78-30891
The calculation of transonic flow over three-dimensional swept wings using the exact potential equation
p0477 A78-45232
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed --- based on potential theory
[BMVG-FBWT-77-15] p0238 N78-18013
POTENTIOMETERS
Angle detector
[NASA-CASE-ARC-11036-1] p0616 N78-32395
POWDER (PARTICLES)
NT METAL POWDER
Ceramics in gas turbine: Powder and process characterization
[NASA-TM-73875] p0208 N78-17059
POWDER METALLURGY
Manufacture of titanium components by hot isostatic pressing
p0013 A78-12456
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
Brake-plates for aeroplanes
[AD-A045932] p0143 N78-14150
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478
POWDERED METALS
U METAL POWDER
POWER CONDITIONING
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
A high-power switching network for a dual-mode antenna --- for airborne transmitter application
p0393 A78-38844
POWER EFFICIENCY
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572
POWER GAIN
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
POWER GENERATORS
U ELECTRIC GENERATORS
POWER LIMITERS
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
POWER LINES
Effects of shields on cables
p0036 N78-11037
Examples of induced voltages measured on aircraft
p0036 N78-11038
Component damage analysis
p0036 N78-11040
POWER PLANTS
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
POWER PROCESSING SYSTEMS
U POWER CONDITIONING
POWER SPECTRA
Azimuthal decomposition of the power spectral density of jet noise
p0375 A78-37532
An exposition on aircraft response to atmospheric turbulence using power spectral density analysis techniques
[AD-A046108] p0143 N78-14057
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
POWER SUPPLIES
Electrical systems (vehicles and weapon subsystems)
[AD-A045343] p0090 N78-12335
Advanced technology servicing equipment for army aircraft
[AD-A052652] p0400 N78-24158
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
POWER SUPPLY CIRCUITS
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Overview of the advanced aircraft electrical system /AAES/ A-7E prototype design
p0061 A78-15573
High-voltage power supply problems and design techniques
p0065 A78-15654
Variable speed constant frequency /VSCF/ aircraft electrical power
[SAE PAPER 771002] p0181 A78-23836
POWER TRANSMISSION
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
POWERED LIFT AIRCRAFT
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304

Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
Conceptual design study of power augmented ram wing in ground effect aircraft
[AIAA PAPER 78-1466] p0512 A78-47915
Powered-Lift Aerodynamics and Acoustics --- conferences
[NASA-SP-406] p0389 N78-24046
Overview of powered-lift technology --- as used on the YC-14 aircraft and C-15 aircraft
p0389 N78-24047
Upper-surface-blowing flow-turning performance
p0389 N78-24048
Results of static tests of a 1/4 scale model of the Boeing YC-14 powered-lift system
p0389 N78-24049
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Externally blown flap impingement parameters
p0390 N78-24053
Some measurements of an EBF powered-lift wake
p0390 N78-24054
Aerodynamic characteristics in ground proximity
p0390 N78-24055
Distributed upper-surface blowing concept
p0390 N78-24056
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059
USB flow characteristics related to noise generation
p0391 N78-24060
Characteristics of USB noise
p0391 N78-24061
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
Overview of the QCSEE program
p0392 N78-24066
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068
Inlet technology for powered-lift aircraft
p0392 N78-24069
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
Investigations of scaling laws for jet impingement
p0393 N78-24074
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117

PRANDTL NUMBER
Calculation of the compressible boundary layer around a profile
[AAAF-NT-77-08] p0034 N78-11019
PRANDTL-MEYER EXPANSION
Interaction of a shock wave with an entropy layer
p0164 A78-20886
PRECAUTIONS
U ACCIDENT PREVENTION
PRECESSION
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity --- rotor precession in steam turbines
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066
PRECIPITATION (METEOROLOGY)
NT DEW
NT RAIN
NT SNOW
PREDICTION ANALYSIS TECHNIQUES
Improved operational maintenance forcasting techniques
p0052 A78-13848
An analysis of the aircraft trailing vortex system
[AIAA PAPER 78-312] p0185 A78-24013
Evaluation of airframe noise prediction methods
p0329 A78-33088
Prediction of the unsteady airloads on oscillating lifting systems and bodies for aeroelastic analyses
p0333 A78-34087
Aircraft flyover noise prediction
p0340 A78-35657
Noise component method for airframe noise
p0340 A78-35660
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
NDE: A key to engine rotor life prediction
p0027 N78-10087
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces --- aging of airframe materials
[AD-A045277] p0096 N78-13049
Prediction of the severity of buffeting --- wind tunnel tests
p0249 N78-18382
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
Simplified sonic-boom prediction --- using aerodynamic configuration charts and calculators or slide rules
[NASA-TP-1122] p0301 N78-20078
Comparison of measured and calculated helicopter rotor impulsive noise --- wind tunnel test data and prediction analysis techniques
[NASA-TM-78473] p0311 N78-20917
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques --- in the Langley V/STOL tunnel
[NASA-TP-1168] p0325 N78-21410
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068

Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
Propulsion-airframe interactions predictability
p0434 N78-26079
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
Prediction of aircraft sideline noise attenuation
[NASA-TM-78717] p0460 N78-27871
Prediction of the severity of buffeting --- structural response to the aerodynamic excitation produced by separated flow
p0493 N78-28404
Prediction of unsteady separated flows on oscillating airfoils
p0494 N78-28409
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28484
Noise prediction technology for CTOL aircraft
p0497 N78-29057
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
Prediction and reduction of rotor broadband noise
p0619 N78-32821
Theoretical models of helicopter rotor noise
p0619 N78-32822
Helicopter external noise prediction and correlation with flight test
p0620 N78-32829
Improved methods for calculating the thickness noise
p0620 N78-32832

PREDICTIONS
NT IMPACT PREDICTION
NT LINEAR PREDICTION
NT PERFORMANCE PREDICTION
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
Noise prediction technology for CTOL aircraft
[NASA-TM-78700] p0366 N78-23875
Technical evaluation report on the Fluid Dynamics Panel Symposium on Prediction of Aerodynamic Loading
[AGARD-AR-125] p0608 N78-32074

PREDICTORS
U PREDICTIONS

PREFLIGHT ANALYSIS
Verification of landing gear design strength
[SAE AIR 1494] p0472 A78-44701

PREFLIGHT OPERATIONS
Arrival inspections/pre-operational inspections (aviation materiel)
[AD-A047260] p0202 N78-16376

PREHEATERS
U HEATING EQUIPMENT

PRELAUNCH TESTS
NT STATIC FIRING

PRELOADING
U PRESTRESSING

PREMIXED FLAMES
Review of flashback reported in prevaporizing/premixing combustors
p0377 A78-37772
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592

PREPARATION
NT PRESTRESSING

PRESSURE
NT ATMOSPHERIC PRESSURE
NT BASE PRESSURE
NT HIGH PRESSURE
NT INLET PRESSURE
NT INTERNAL PRESSURE
NT ISOSTATIC PRESSURE
NT LOW PRESSURE
NT LUMINOUS INTENSITY
NT SOUND PRESSURE
NT STAGNATION PRESSURE
NT STATIC PRESSURE
NT SUPERCRITICAL PRESSURES
NT TRANSIENT PRESSURES
NT WALL PRESSURE
Evaluation of a pressurized air start system for advanced army helicopters --- gas turbine engines
[AD-A051967] p0360 N78-23082

PRESSURE CABINS
U PRESSURIZED CABINS

PRESSURE DISTRIBUTION
Asymptotic theory of the swept wing
p0052 A78-14053
Pressure distribution over sharp-nosed cones situated at angles of attack from 0 to 10 degrees in supersonic flow
p0165 A78-20889
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
Computational transonic flow about realistic aircraft configurations
[AIAA PAPER 78-104] p0172 A78-22576
Flowfield and pressure field of a model propeller
p0191 A78-24451
Some singular aspects of three-dimensional transonic flow
p0223 A78-26234
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
Experimental verification of an annular aerofoil theory
p0230 A78-27938
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
Pressure distribution on a symmetrical butterfly wing
p0415 A78-40799
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
Aerodynamic design of thick, supercritical wings through the concept of equivalent subsonic pressure distribution
[NLR-MP-78011-U] p0477 A78-45230
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673
Some comments on sonic boom focusing
p0584 A78-51172
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
Unsteady pressure distribution measurements at two trapezoidal wings with unit aspect ratio
p0205 N78-17020
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed --- based on potential theory
[BMVG-FBWT-77-15] p0238 N78-18013

Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis --- NASTRAN
[AD-A048840] p0254 N78-19065
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8474] p0299 N78-20065
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
Problems concerning high temperatures in small turbomachines
p0319 N78-21121
Pressure inside a room subjected to sonic boom
[UTIAS-TN-207] p0345 N78-22029
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
Investigations on unsteady pressure distribution measurements in rotating systems
[DLR-FB-77-43] p0566 N78-31135
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
Technical evaluation report on the Fluid Dynamics Panel Symposium on Prediction of Aerodynamic Loading
[AGARD-AR-125] p0608 N78-32074
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108

PRESSURE DRAG
NT INTERFERENCE DRAG
NT SUPERSONIC DRAG
NT WAVE DRAG
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064

PRESSURE EFFECTS
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Dynamic response of lift fans subject to varying backpressure --- for Surface Effect Ships
[AIAA PAPER 78-756] p0292 A78-32176
Pressure dependence of turbulent jet noise
p0470 A78-44357
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594

PRESSURE FIELDS
U PRESSURE DISTRIBUTION

PRESSURE GAGES
NT BAROMETERS

PRESSURE GRADIENTS
Unsteady boundary layer with self-induced pressure
p0230 A78-28102
On the nonstationary boundary layer with self-induced pressure at transonic external stream velocities
p0591 A78-52043
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069

PRESSURE HEADS
The use of the total-head rise across the propeller of the De Havilland Canada DHC-2 beaver as a similarity parameter to simulate power-on flight in the wind tunnel
[VTH-190] p0149 N78-15022

PRESSURE MEASUREMENTS
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
Loss prediction in axial compressors - A bibliographic study
[ONERA, TP NO. 1978-65] p0383 A78-38892
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
Unsteady, surface pressure and near-wave hotwire measurements of a circulation control airfoil
[AD-A050025] p0313 N78-21061
Transonic wind tunnel tests on two-dimensional aerofoil sections. Determination of pressure distribution and drag for an aerofoil with a modified NACA 65 sub2-215 section in FFA wind tunnel S5, part 2
[FFA-TN-AU-725] p0313 N78-21062
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
Tabulated pressure measurements of a NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2634] p0393 N78-24077
Wind-tunnel measurements of aerodynamic load distribution on an NASA supercritical-wing research airplane configuration
[NASA-TM-X-2469] p0393 N78-24079
Methods and results of boundary layer measurements on a glider
[NASA-TM-75294] p0394 N78-24085
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064
Static pressure orifice system testing and apparatus
[NASA-CASE-LAR-12269-1] p0630 N78-33123

PRESSURE OSCILLATIONS
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878

Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures
p0580 A78-50780
PRESSURE PROBES
U PRESSURE SENSORS
PRESSURE PULSES
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743
PRESSURE RECOVERY
Swirl flow in conical diffusers
p0230 A78-27910
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
PRESSURE REGULATORS
Description of the new regulating valve for the transonic supersonic wind tunnel
[DLR-IB-151-76/6] p0044 N78-11130
PRESSURE SENSORS
Use of NS LX1600A as a short-range altimeter
p0273 A78-28880
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Atmospheric pressure jumps measured with arrays of sensitive pressure sensors in the vicinity of Chicago's O'Hare International Airport
[PB-277518/7] p0356 N78-22551
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
PRESSURE TRANSDUCERS
U PRESSURE SENSORS
PRESSURE WAVES
U ELASTIC WAVES
PRESSURE WELDING
NT DIFFUSION WELDING
PRESSURIZED CABINS
The development of the first pressurized sailplane
p0075 A78-16598
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
PRESTON TUBES
U PITOT TUBES
U SPEED INDICATORS
PRESTRAINING
U PRESTRESSING
PRESTRESSING
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
PRETREATMENT
NT PRESTRESSING
PRETWISTING
U PRESTRESSING
U TWISTING
PREVENTION
NT ACCIDENT PREVENTION
NT CORROSION PREVENTION
NT FIRE PREVENTION
NT ICE PREVENTION
PRINTED CIRCUITS
NT LARGE SCALE INTEGRATION
PRISMS
Elastic deformations of rapidly-rotating prismatic mirrors
p0168 A78-21374
PRIVATE AIRCRAFT
U GENERAL AVIATION AIRCRAFT
PROBABILITY
U PROBABILITY THEORY
PROBABILITY DENSITY FUNCTIONS
NT RAYLEIGH DISTRIBUTION
NT WEIBULL DENSITY FUNCTIONS
PROBABILITY THEORY
Taking a new perspective on design --- aeronautical engineering curricula
p0335 A78-34643
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
Aircraft structural reliability and risk theory: A review
p0555 N78-30284
PROBLEM SOLVING
NT ASYMPTOTIC METHODS
NT ITERATIVE SOLUTION
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways, appendixes
[NASA-CR-145281] p0200 N78-16066
Problem-solving with simulation in the world of an air traffic controller
p0451 N78-27098
PROCEDURES
NT FINITE ELEMENT METHOD
PROCESSORS (COMPUTERS)
U CENTRAL PROCESSING UNITS
PROCUREMENT
NT GOVERNMENT PROCUREMENT
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
PROCUREMENT MANAGEMENT
Can the Army's $2.8 billion program modernize the CH-47 helicopter be improved
[PB-277397/6] p0440 N78-26139
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
PROCUREMENT POLICY
Aeronautical procurement - The primary specification system
[AIAA PAPER 78-1489] p0514 A78-47932
The role of engineering in the flight equipment purchasing process
[NASA-CR-156839] p0213 N78-17915
On setting avionic subsystem unit production cost goals --- contract management and procurement policy
[AD-A051337] p0398 N78-24133
Can the Army's $2.8 billion program modernize the CH-47 helicopter be improved
[PB-277397/6] p0440 N78-26139
Status of the Navy's vertical short takeoff and landing aircraft
[PB-277401/6] p0440 N78-26140
PRODUCT DEVELOPMENT
NT WEAPONS DEVELOPMENT
The next commercial jet transport: The need, economics, technology, and financing; Air Transportation Research International Forum, San Francisco, Calif., May 9, 1977, Papers
p0057 A78-15084
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
Use of and experience with simulation in the development of the VFW 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942
Capacitors for aircraft high power
[AD-A046340] p0151 N78-15052
Engineering and development program plan: Discrete Address Beacon System (DABS)
[AD-A057122] p0625 N78-33073
Engineering and development program plan: Advanced Integrated Flight Systems (AIFS)
[AD-A056770] p0630 N78-33119
PRODUCTION ENGINEERING
NT PRODUCTION PLANNING
Article quality index realization logic-block diagram --- in aircraft industry quality control
p0049 A78-13179
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
Recent progress and technical and economic outlooks in the processing of materials for

airframe elements
p0221 A78-26036
Laser and optical methods of monitoring in aircraft construction --- Russian book
p0281 A78-30123
Alpha Jet - A European aircraft production program with a great future
p0470 A78-44616
New production methods gain --- in engine manufacturing for U.S. aerospace industry
p0598 A78-53239
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091
Ceramics in gas turbine: Powder and process characterization
[NASA-TM-73875] p0208 N78-17059
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239

PRODUCTION MANAGEMENT
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092

PRODUCTION METHODS
U PRODUCTION ENGINEERING

PRODUCTION PLANNING
Mathematical planning and bulk service methods of civil aviation --- Russian book
p0015 A78-13000
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
Helicopter manufacturing technology. III - Future manufacturing technologies
p0597 A78-53174
Status of the Air Force's F-16 aircraft program
[PB-280304/7] p0567 N78-31946

PRODUCTS
NT PETROLEUM PRODUCTS

PROFILOMETERS
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165

PROGRAM MANAGEMENT
U PROJECT MANAGEMENT

PROGRAM VERIFICATION (COMPUTERS)
FAA's certification position on advanced avionics
p0335 A78-34642
Subsystem verification of an AFLC organically developed F-15 simulation --- Air Force Logistics Command
p0533 A78-49901
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902

PROGRAMMING LANGUAGES
NT FORTRAN
The DAIS Executive - An introduction --- avionics computer software
p0534 A78-49932
The versatility of Jovial J73 in avionics systems
p0536 A78-49956
A flight simulation high order language study
p0536 A78-49957
Higher order languages for avionics software - A survey, summary and critique
p0536 A78-49959

PROGRAMS
NT ASSESS PROGRAM
NT ATLIT PROJECT
NT NASA PROGRAMS
NT QUIET ENGINE PROGRAM
NT SOURCE PROGRAMS
NT SQUID PROJECT
NT SUPERSONIC CRUISE AIRCRAFT RESEARCH
NT TACT PROGRAM
NT TERMINAL CONFIGURED VEHICLE PROGRAM
NT TILT ROTOR RESEARCH AIRCRAFT PROGRAM
NT U.S.S.R. SPACE PROGRAM

PROJECT MANAGEMENT
C-5 wing modification - Weight and design to cost status
p0110 A78-17897
Sikorsky YUH-60A UTTAS helicopter flight test program
p0125 A78-19449
Integrated time, cost, and performance planning in aircraft development - Computer-aided project management in the development and construction of a modern aircraft
p0473 A78-44823
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
Pollution reduction technology program for class T4 (JT8D) engines
p0039 N78-11067
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981
Doctrine versus capabilities: A project manager's dilemma with the CH-47 helicopter
[AD-A052376] p0413 N78-25970
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
Overview of the NASA YF-12 program
p0605 N78-32056

PROJECT PLANNING
Back to the drawing board --- management of design engineering
p0126 A78-19548
The ZTL/KEL program in the preliminary phase of future military projects
p0470 A78-44618

PROJECTILES
NT HYPERVELOCITY PROJECTILES
Minimum drag surfaces --- for traveling projectiles
p0342 A78-35787

PROJECTORS
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362

PROJECTS
NT ATLIT PROJECT
NT SQUID PROJECT

PROOFS
U PROVING

PROPAGATION (EXTENSION)
NT CRACK PROPAGATION
NT FLAME PROPAGATION

PROPAGATION MODES
Study of the propagation of higher modes in cylindrical ducts with impedance walls --- for aircraft noise reduction
p0221 A78-25773

PROPANE
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099

PROPELLANT ADDITIVES
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235

PROPELLANTS
NT HYBRID PROPELLANTS
NT SLURRY PROPELLANTS
NT SOLID PROPELLANTS
NT SOLID ROCKET PROPELLANTS

PROPELLER BLADES
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
Deformation curve of rotary airfoil blades
p0386 A78-39540
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft

[NASA-TM-73816] p0102 N78-13854
Quiet propeller/rotor concept evaluation --- of the UH-1 helicopter
[AD-A047297] p0197 N78-16047
Research on the statically thrusting propeller
[NASA-CR-157214] p0409 N78-25092
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833

PROPELLER DRIVE
NT HELICOPTER PROPELLER DRIVE
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
The integrated shielded propeller as a drive system for general aviation aircraft
[DGLR PAPER 77-045] p0190 A78-24434
A new propeller for agricultural aircraft
p0327 A78-32645
Engines for small propeller-driven RPVs, report of Sub-Group A of AGARD Working Group on Propulsion and Power Supplies for unmanned vehicles, volume 1
[AGARD-AR-101-VOL-1] p0151 N78-15054
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives --- light aircraft Sportavia S5
[BMVG-FBWT-77-16] p0245 N78-18072

PROPELLER EFFICIENCY
Return of the propeller
p0220 A78-25516
An analysis of the force system of a propeller
[CRANFIELD-AERO-33] p0147 N78-15003

PROPELLER FANS
Return of the propeller
p0220 A78-25516
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Some advances in design techniques for low noise operation of propellers and fans
p0340 A78-35659
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894

PROPELLER SLIPSTREAMS
Flowfield and pressure field of a model propeller
p0191 A78-24451

PROPELLERS
NT PROPELLER FANS
NT VARIABLE PITCH PROPELLERS
Computation of inductive velocity in the plane of a lightly loaded lifting propeller
p0127 A78-19658
Design and analysis of propellers for low Reynolds number application to mini-RPV's
[SAE PAPER 770999] p0181 A78-23834
Identification of material for AN, MS, and AS engine and propeller standard utility parts and also for company parts
[SAE AS 269G] p0471 A78-44680
Progress in propeller aerodynamics
p0507 A78-47173
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
Minimum on-axis noise for a propeller or helicopter rotor
p0590 A78-51949
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
An analysis of the force system of a propeller
[CRANFIELD-AERO-33] p0147 N78-15003
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
The use of the total-head rise across the propeller of the De Havilland Canada DHC-2 beaver as a similarity parameter to simulate power-on flight in the wind tunnel
[VTH-190] p0149 N78-15022
The flow about a slender propeller-driven body in a temperature stratified fluid
p0154 N78-15432
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives --- light aircraft Sportavia S5
[BMVG-FBWT-77-16] p0245 N78-18072
Design of propellers for minimum noise
p0351 N78-22094
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
A transonic propeller of triangular plan form: An extension
[UTIAS-TN-218] p0454 N78-27123

PROPORTIONAL CONTROL
Design of multivariable PID controllers with application to a gas-turbine --- Proportional Integral Derivative
p0072 A78-16308

PROPRIOCEPTION
One axis artificial feel system --- pilot proprioceptive cue forces on aircraft joy stick
p0224 A78-26488

PROPULSION
NT ASCENT PROPULSION SYSTEMS
NT AUXILIARY PROPULSION
NT JET PROPULSION
NT MAN OPERATED PROPULSION SYSTEMS
NT NUCLEAR PROPULSION
NT PHOTONIC PROPULSION
NT SOLAR PROPULSION
NT SPACECRAFT PROPULSION
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096

PROPULSION SYSTEM CONFIGURATIONS
NT ASCENT PROPULSION SYSTEMS
Research needs for U.S. Army aircraft propulsion
[AIAA PAPER 78-45] p0171 A78-22558
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
Impact of engine cycle parameters on V/STOL Type A configuration and commonality
[SAE PAPER 770980] p0179 A78-23821
Special problems in the development of the propulsion system for an over-the-wing engine configuration
[DGLR PAPER 77-046] p0190 A78-24435
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
Propulsion system airframe integration studies - Advanced supersonic transport
[AIAA PAPER 78-1053] p0521 A78-48488
Evaluation of inlet reingestion for large bypass ratio V/STOL aircraft
[AIAA PAPER 78-1079] p0521 A78-48495
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
The influence of propulsion and control system concepts on design of a Navy Type A V/STOL airplane
[AIAA PAPER 78-1505] p0529 A78-49788
Ground effects testing of two, three, and four jet configurations
[AIAA PAPER 78-1510] p0529 A78-49789
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091

Advanced supersonic propulsion study, phase 4
[NASA-CR-135273] p0038 N78-11062
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
Low speed test of a high-bypass-ratio propulsion system with an asymmetric inlet designed for a tilt-nacelle V/STOL airplane
[NASA-CR-152072] p0209 N78-17062
Unsteady loads due to propulsive lift configurations. Part D: The development of an experimental facility for the investigation of scaling effects on propulsive lift configurations
[NASA-CR-156123] p0300 N78-20070
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102

PROPULSION SYSTEM PERFORMANCE
Aircraft engines and gas turbines --- Book
p0113 A78-18400
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Development of the propulsion simulator - A test tool applicable to V/STOL configurations
[SAE PAPER 770984] p0180 A78-23823
Concorde AIDS - Powerplant applications --- Airborne Integrated Data Systems
[SAE PAPER 770995] p0181 A78-23831
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
Evolution of the aircraft gas turbine engine
p0282 A78-30257
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309
New structuralization and work of current interest in the research area of fluid mechanics --- propulsion systems, aerodynamics and acoustics
p0337 A78-34941
Aircraft propulsion from the back room /Sixty-sixth Wilbur and Orville Wright Memorial Lecture/
p0369 A78-36279
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
Integration of a variable cycle engine concept in a supersonic cruise aircraft
[AIAA PAPER 78-1049] p0466 A78-43574
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592
Experimental determination of propulsion induced ground effects of typical three fan type A V/STOL configurations
[AIAA PAPER 78-1507] p0516 A78-47943
The impact of contingency power concepts on V/STOL aircraft take-off-gross-weight
[AIAA PAPER 78-926] p0519 A78-48451
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
The effect of thrust vectoring and attitude control concepts on the propulsion system of V/STOL aircraft
[AIAA PAPER 78-1020] p0520 A78-48481
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
Future large civil turbofans and powerplants /Seventeenth Short Bros. Commemorative Lecture/
p0587 A78-51519
Advanced supersonic propulsion study, phases 3 and 4 --- variable cycle engines
[NASA-CR-135236] p0097 N78-13058
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
Internal performance predictions for Langley scramjet engine module
[NASA-TM-X-74038] p0208 N78-17057
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Propulsion-airframe interactions predictability
p0434 N78-26079
CF6 jet engine performance deterioration results
p0446 N78-27049
JT9D jet engine performance deterioration
p0446 N78-27050
CF6 performance improvement
p0447 N78-27051
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads --- 747 aircraft performance
[NASA-CR-135395] p0454 N78-27124
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
Real time digital propulsion system simulation for manned flight simulators
[NASA-TM-78958] p0456 N78-27137
Large scale static tests of a tilt-nacelle V/STOL propulsion/attitude control system
[NASA-CR-152181] p0611 N78-32098

PROPULSIVE EFFICIENCY
NT PROPELLER EFFICIENCY
An optimistic view of the plane facts --- cost-efficient airliners development
p0057 A78-15086
Gas turbine module performance analysis
[SAE PAPER 770992] p0180 A78-23828
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
Thrust characteristics of thrust vector control systems with blowing injection of chemically nonreactive gases
p0187 A78-24254
Evolution of the aircraft gas turbine engine
p0282 A78-30257
Supersonic transports --- drag minimization techniques
p0286 A78-31152
The aircraft ducted fan
p0286 A78-31153
Energy conserving aircraft from the engine viewpoint
p0287 A78-31310
Aero engines climb towards better fuel efficiency
p0372 A78-37114
Propulsion --- NASA program for aircraft fuel consumption reduction
p0461 A78-43360
Aircraft flying performance: Principles, flight attitude, flight phases --- German book
p0480 A78-45425
Operating characteristics of bypass turbojet engines --- Russian book
p0540 A78-50125
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020

Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
ACEE propulsion overview
p0446 N78-27048

PROTECTION
NT CIRCUIT PROTECTION
NT CORROSION PREVENTION
NT ENVIRONMENT PROTECTION
NT RADIATION PROTECTION
NT THERMAL PROTECTION
Ceramic composite protection for turbine disc bursts --- for the A-300 aircraft
p0026 N78-10083
Direct effects protection
p0035 N78-11029
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
Protection of cooled blades of complex internal structure
p0321 N78-21141

PROTECTIVE CLOTHING
NT HELMETS
PROTECTIVE COATINGS
NT ANODIC COATINGS
NT CERAMIC COATINGS
Water borne coatings
p0069 A78-15852
Erosion resistant coatings --- for aircraft parts
p0120 A78-19056
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Coatings for aircraft which operate in marine environments
p0468 A78-44113
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513
Reaction diffusion in the NiCrAl and CoCrAl systems
p0597 A78-53063
High temperature corrosion-resistant protective coatings in stationary gas turbines
[NASA-TM-75181] p0086 N78-12080
Epoxy and polyurethane paint compositions for agricultural airplanes
[AD-A045914] p0144 N78-14173
Exploratory development of conductive coating materials --- for use on aircraft radomes
[AD-A048253] p0247 N78-18138
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
Adhesion of erosion resistant tapes on several surface configurations
[FOK-R-2132] p0442 N78-26220

PROTOTYPES
YC-14B prototype testing
p0233 A78-28459

PROVING
TRSB microwave landing system demonstration program at John F. Kennedy International Airport, Long Island, New York, USA
[AD-A055447] p0559 N78-31070

PSYCHOACOUSTICS
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609

PSYCHOLOGICAL FACTORS
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058

PSYCHOLOGICAL SETS
The missed approach --- psychological factors in aircraft instrument landing decisions
p0587 A78-51517

PSYCHOLOGY
NT PSYCHOACOUSTICS
NT PSYCHOLOGICAL SETS
PSYCHOPHYSICS
NT PSYCHOACOUSTICS
PSYCHOPHYSIOLOGY
NT WORKLOADS (PSYCHOPHYSIOLOGY)
PUBLIC HEALTH
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222

PUBLIC LAW
NT LEGAL LIABILITY
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624

PUBLIC RELATIONS
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070

PULSATING FLOW
U UNSTEADY FLOW
PULSE COMMUNICATION
ARINC communications addressing and reporting system /ACARS/ - The data link that got implemented and why
[AIAA 77-1522] p0008 A78-12263
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
Digital avionic communication --- computer system design to improve interequipment transmission
p0068 A78-15694
A modulation/encoding scheme for use in a fading environment
p0069 A78-15718
Two-channel method of processing interval codes --- for navigation systems
p0429 A78-43085

PULSE DOPPLER RADAR
NT MONOPULSE RADAR
An advanced computer calculation of ground clutter in an airborne pulse Doppler radar
p0066 A78-15662
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038

PULSE FREQUENCY MODULATION
Uplink coverage measurements in the Los Angeles area for passive BCAS --- collision avoidance
[AD-A048288] p0239 N78-18027

PULSE MODULATION
NT PULSE FREQUENCY MODULATION
The extension of GPMS architecture for the distribution of audio signals within Navy aircraft
[AD-A044739] p0090 N78-12299

PULSE RADAR
NT MONOPULSE RADAR
NT PULSE DOPPLER RADAR
Multistatic-radar binomial detection
p0222 A78-26158
Color displays for airborne weather radar
p0372 A78-36980
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
A high duty factor chirp radar
p0538 A78-49976

PULSED JET ENGINES
Mathematical model of the combustion-chamber filling process in a pulsating jet engine
p0131 A78-20253
Simplified theoretical model of combustion in the chamber of a pulsed jet engine
p0132 A78-20279

PULSED RADIATION
NT ELECTROMAGNETIC PULSES
PULSES
NT ELECTRIC PULSES

NT ELECTROMAGNETIC PULSES
NT PRESSURE PULSES
PUMPS
NT AXIAL FLOW PUMPS
NT CENTRIFUGAL PUMPS
NT FUEL PUMPS
PURSUIT TRACKING
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
Optimization and differential games
p0592 A78-52401
PYLONS
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
Aerodynamic centre of wing-fuselage-nacelle combinations: Effect of wing-pylon mounted nacelles
[ESDU-77012] p0079 N78-12010
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
PYRAMIDS
A pyramid skewed axis sensor set for multiplex flight control systems
[ARC-R/M-3808] p0553 N78-30143
PYRANOMETERS
The use of pyranometers onboard aircraft
[DLR-FB-77-24] p0145 N78-14379
The use of pyranometers in aircraft
[ESA-TT-433] p0250 N78-18408
PYROGRAPHALLOY
U COMPOSITE MATERIALS
U REFRACTORY MATERIALS
PYROMETRY
U TEMPERATURE MEASUREMENT
P3V AIRCRAFT
U P-3 AIRCRAFT

Q

QUADRATIC PROGRAMMING
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
QUADRATURE APPROXIMATION
U QUADRATURES
QUADRATURES
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
QUADRUPOLES
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
QUALITATIVE ANALYSIS
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
QUALITY
NT AIR QUALITY
NT ENVIRONMENTAL QUALITY
NT RIDING QUALITY
NT WATER QUALITY
QUALITY CONTROL
Article quality index realization logic-block diagram --- in aircraft industry quality control
p0049 A78-13179
Technical-analytical assistance now even in the field --- transportable lab for analysis of jet fuels and liquid oxygen supplies
p0119 A78-19053
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
Laser and optical methods of monitoring in aircraft construction --- Russian book
p0281 A78-30123
Quality assurance in the fabrication of products in aviation technology
p0292 A78-32267
Analysis of GTE tolerance monitoring parameter formation --- gas turbine engine
p0517 A78-48212
Improving reliability of avionics equipments through engineering testing
[AD-A042454] p0024 N78-10064
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 31 December 1977
[AD-A055672] p0562 N78-31098
QUANTITATIVE ANALYSIS
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
QUASI-STEADY STATES
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
QUASILINEARITY
U NONLINEARITY
QUATERNIONS
Digital simulation of aircraft flight path dynamics using quaternions
[AIAA PAPER 78-311] p0185 A78-24012
QUEUEING THEORY
Queuing models for estimating aircraft fleet availability
p0069 A78-15895
Tandem-queue algorithm for airport user flows
p0284 A78-30677
A tandem-queue algorithm for evaluating overall airport capacity
p0202 N78-16741
QUIET ENGINE PROGRAM
The quiet battle over aircraft noise
p0058 A78-15167
Preliminary QCSEE program - Test results --- Quiet Clean Short-haul Experimental Engine
[SAE PAPER 771008] p0181 A78-23840
Advanced quiet propulsion for general aviation
[DGLR PAPER 77-044] p0190 A78-24433
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
Preliminary QCSEE program test results
[NASA-TM-73732] p0151 N78-15042
Filament-winding fabrication of QCSEE configuration fan blades
[NASA-CR-135332] p0198 N78-16052
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Overview of the QCSEE program
p0392 N78-24066
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071

R

RACON BEACONS
U RADAR BEACONS
RADAR
NT AIRBORNE SURVEILLANCE RADAR
NT COHERENT RADAR
NT CONTINUOUS WAVE RADAR
NT DOPPLER RADAR
NT METEOROLOGICAL RADAR
NT MONOPULSE RADAR
NT MOVING TARGET INDICATORS
NT OPTICAL RADAR
NT PULSE DOPPLER RADAR
NT PULSE RADAR

NT RADAR MEASUREMENT
NT RANGE AND RANGE RATE TRACKING
NT SEARCH RADAR
NT SECONDARY RADAR
NT SIDE-LOOKING RADAR
NT SURVEILLANCE RADAR
NT TRACKING RADAR
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297
RADAR ANTENNAS
The ABEILLE electronic scanning antenna --- for fighter aircraft fire control radar
p0338 A78-35050
Halogenated solvent-induced corrosion in hydraulic systems --- hydraulic drives for aircraft radar antennas
[ASLE PREPRINT 78-AM-4A-2] p0378 A78-38083
Development of a discrete address beacon system --- testing monopulse beacon antennas
[AD-A048247] p0206 N78-17036
RADAR APPROACH CONTROL
Flight testing of radars
p0054 A78-14933
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
RADAR BEACONS
NT DISCRETE ADDRESS BEACON SYSTEM
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634
A single site passive collision avoidance system
p0111 A78-17912
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
Airport traffic surveillance
p0594 A78-52957
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
DABS coverage
[AD-A045940] p0139 N78-14022
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Computer simulations of ATCRBS processing equipment for use with the aims and transient effects performance prediction models
[AD-A046758] p0139 N78-14025
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
Development of a discrete address beacon system --- testing monopulse beacon antennas
[AD-A048247] p0206 N78-17036
Uplink coverage measurements in the Los Angeles area for passive BCAS --- collision avoidance
[AD-A048288] p0239 N78-18027
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
Proposed methods and criteria for ATCRBS PRF assignment
[AD-A050050/4] p0360 N78-23074
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
Discrete Address Beacon System (DABS) Development Test and Evaluation (DT and E) program
[AD-A052363] p0439 N78-26123
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070
RADAR CROSS SECTIONS
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
RADAR DATA
The F-16 sampled data assembly
p0063 A78-15618
Display of radar information by the strata method
p0426 A78-42774
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
The ARTS III Umbrella - Concepts and applications --- for collecting and distributing aircraft positional data within ATC radar coverage areas
p0594 A78-52958
RADAR DETECTION
Interferometer design for elevation angle estimation --- radar detection in ATC
p0001 A78-10304
An advanced computer calculation of ground clutter in an airborne pulse Doppler radar
p0066 A78-15662
Multistatic-radar binomial detection
p0222 A78-26158
By accident or design --- ATC collision avoidance systems
p0334 A78-34375
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
Moving target detector /MTD/ radar system
p0595 A78-52963
RADAR DIRECTION FINDERS
U RADIO DIRECTION FINDERS
RADAR DISPLAYS
U RADARSCOPES
RADAR ECHOES
NT CLUTTER
On the possibility of classifying radar targets with a coherently measured echo signal --- German book
p0293 A78-32308
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
RADAR EQUIPMENT
NT RADAR ANTENNAS
NT RADAR BEACONS
NT RADAR RECEIVERS
NT RADAR TRANSMITTERS
NT RADARSCOPES
Radar electronic counter-countermeasures
p0222 A78-26159
Fire power --- fighter aircraft target acquisition and tracking radar
p0288 A78-31425
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
Aircraft radar systems --- Russian book
p0377 A78-37873
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
Development of a Discrete Address Beacon System
[AD-A046580] p0139 N78-14029
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
Interference analysis between TRSB microwave landing system and adjacent C-band radars
[AD-A049882] p0304 N78-20101
Avionics cost development for alternatives of selected air traffic control systems
[AD-A054823] p0547 N78-30080
RADAR HOMING MISSILES
Solid-state active RF missile seeker - Future role in all-weather systems

p0054 A78-14935
RADAR IMAGERY
Moving target analysis utilizing side-looking airborne radar
p0105 A78-17196
RADAR MAPS
NT RADAR IMAGERY
RADAR MEASUREMENT
EAR navigation update modes --- Electronically Agile Radar
p0066 A78-15667
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
Combinatorially derived limits on the surface return for an air/surface monopulse ranging radar
p0539 A78-50001
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
RADAR NAVIGATION
The effect of radar disturbances on aircraft runway arrival time in a four-dimensional navigation terminal approach
[AIAA 77-1512] p0007 A78-12257
Helicopter TF radar Pavelow III
p0068 A78-15697
B-1 terrain following development
p0233 A78-28456
Pattern recognition as an aid to radar navigation
p0530 A78-49855
Airline contributions to better air traffic control
p0587 A78-51518
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
Proposal for a cost effective radar navigation system for low altitude and terminal area flight
p0431 N78-26057
RADAR OBSERVATION
U RADAR TRACKING
RADAR PHOTOGRAPHY
Color displays for airborne weather radar
p0372 A78-36980
RADAR RANGE
Flight testing of radars
p0054 A78-14933
RADAR RECEIVERS
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
Smart dispensing with the AN/ALE-39 and derivative dispenser systems --- computer controlled ejection of chaff, flares and squibs
p0054 A78-14937
Infrared receiver performance --- airborne warning system by detection of target spectral signature
p0538 A78-49985
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
RADAR RECEPTION
Combinatorially derived limits on the surface return for an air/surface monopulse ranging radar
p0539 A78-50001
RADAR REFLECTIONS
U RADAR ECHOES
RADAR RESOLUTION
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
Omega ambiguity resolution techniques
p0111 A78-17913
Display of radar information by the strata method
p0426 A78-42774
RADAR SCANNING
The ABEILLE electronic scanning antenna --- for fighter aircraft fire control radar
p0338 A78-35050
RADAR SIGNATURES
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070
RADAR TRACKING
Keeping pace with avionics innovations --- data processing in navigation and tracking
p0069 A78-15712
AIRTRACK - A system for air traffic control
p0073 A78-16376
The technology for the automatic tracking of targets of surveillance and secondary radar
p0073 A78-16377
A performance analysis of a radar tracking filter --- digital Kalman filter for aircraft targets
p0107 A78-17564
Solution of multitarget, multisensor tracking problems on the Illiac IV parallel processor
p0113 A78-18063
Navigation procedure - Present systems and development trends
[DGLR PAPER 77-018] p0189 A78-24411
Multipath limitations on low-angle radar tracking
p0222 A78-26157
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
The new system for processing and presenting radar data in the Air Traffic Control Center of Barcelona
p0383 A78-38997
Air-to-air designate/track with time sharing
p0538 A78-49977
Improved aircraft tracking using maneuver statistics enroute and in the terminal area
p0316 N78-21087
Perspective radar display system: TV-like presentation on CRT provides higher lateral position and lateral motion sensitivity than a PPI
[AD-A052342] p0402 N78-24418
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
RADAR TRANSMISSION
Some results on digital chirp --- radar design
p0222 A78-26160
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038
A high duty factor chirp radar
p0538 A78-49976
RADAR TRANSMITTERS
Evaluation of F-16 radar attachment assemblies for reusable containers
[AD-A053424] p0459 N78-27432
RADARSCOPES
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
The new system for processing and presenting radar data in the Air Traffic Control Center of Barcelona
p0383 A78-38997
Display of radar information by the strata method
p0426 A78-42774
Airport Surface Detection Equipment (ASDE-3) project plan
[AD-A052362] p0457 N78-27144
RADIAL FLOW
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
RADIANT FLUX DENSITY
NT LUMINOUS INTENSITY
RADIATION ABSORPTION
NT ATMOSPHERIC ATTENUATION
RADIATION DAMAGE
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
RADIATION DISTRIBUTION
NT ANTENNA RADIATION PATTERNS
NT DIFFRACTION PATTERNS

A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
RADIATION DOSAGE
The Concorde and cosmic rays
p0225 A78-26739
RADIATION EFFECTS
NT RADIATION DAMAGE
RADIATION EXPOSURE
U RADIATION DOSAGE
RADIATION FIELDS
U RADIATION DISTRIBUTION
RADIATION HAZARDS
Radiation safety in high-altitude air traffic
p0071 A78-16184
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
RADIATION MEASURING INSTRUMENTS
NT ELECTROSTATIC PROBES
NT FLIR DETECTORS
NT INFRARED DETECTORS
NT INFRARED RADIOMETERS
NT INFRARED SPECTROMETERS
NT PYRANOMETERS
NT RADIOMETERS
NT SPECTRORADIOMETERS
Automatic system employing radioactive radiation to level-out an aircraft at landing
p0216 A78-25011
RADIATION METERS
U RADIATION MEASURING INSTRUMENTS
RADIATION NOISE
U ELECTROMAGNETIC NOISE
RADIATION PRESSURE
NT LUMINOUS INTENSITY
NT SOUND PRESSURE
RADIATION PROTECTION
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
RADIATION SPECTRA
NT EMISSION SPECTRA
NT INFRARED SPECTRA
NT VIBRATIONAL SPECTRA
RADIATIVE HEAT TRANSFER
Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor
p0330 A78-33114
RADIATIVE TRANSFER
NT RADIATIVE HEAT TRANSFER
RADIO ANTENNAS
NT MICROWAVE ANTENNAS
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
Null steering antennas in the tactical scenario
p0226 A78-27037
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325
Portable earth station antenna study system
[AD-A054791] p0614 N78-32321
RADIO ATTENUATION
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
RADIO BEACONS
NT OMNIDIRECTIONAL RADIO RANGES
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
Special study: Emergency locator transmitters, an overview
[NTSB-AAS-78-1] p0314 N78-21063
RADIO COMMUNICATION
NT RADIO RELAY SYSTEMS
NT RADIO TELEMETRY
NT TIME DIVISION MULTIPLE ACCESS
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246
Aircraft Satellite Data Link
p0338 A78-34971
Dual band airborne SATCOM terminal
p0537 A78-49972
Applications for airborne digital communications
p0590 A78-51896
RADIO CONTROL
Solid-state active RF missile seeker - Future role in all-weather systems
p0054 A78-14935
Grumman's radio-controlled experimental air force
p0379 A78-38522
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
RADIO DIRECTION FINDERS
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
On the compensation of radio direction finders --- antenna optimization in airport environments
p0379 A78-38247
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107
RADIO EMISSION
Aircraft measurements of the spatial fluctuation characteristics of atmospheric radio emission at wavelengths of 0.8 and 1.35 cm
p0229 A78-27721
RADIO EQUIPMENT
NT OMNIDIRECTIONAL RADIO RANGES
NT RADIO ANTENNAS
NT RADIO BEACONS
NT RADIO FILTERS
NT RADIO RECEIVERS
NT RADIO TRANSMITTERS
NT SPACECRAFT ANTENNAS
NT TRANSMITTER RECEIVERS
NT TRANSPONDERS
NT VERY HIGH FREQUENCY RADIO EQUIPMENT
An evaluation of weight optimization of aircraft radioelectronic equipment
p0174 A78-22646
The AN/ARC-164 radio - Life-cycle-cost savings --- UHF communication equipment reliability and maintainability improvement
p0276 A78-29479
Modern RF system design for aircraft --- tactical information exchange system
p0373 A78-37341
Evaluating avionics weight efficiency
p0518 A78-48228
RADIO FILTERS
Filtering techniques in avionic transmitters
p0384 A78-39084
RADIO FREQUENCIES
NT C BAND
NT EXTREMELY HIGH FREQUENCIES
NT HIGH FREQUENCIES
NT LOW FREQUENCIES
NT SUPERHIGH FREQUENCIES
NT ULTRAHIGH FREQUENCIES
NT VERY HIGH FREQUENCIES
RADIO FREQUENCY INTERFERENCE
NT CHIRP SIGNALS
NT ELECTROMAGNETIC NOISE
An adaptive interference cancellation system for elimination of co-located interference signals --- for ATC sites
p0227 A78-27041
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038
Current and scattering field of a long short-circuited receiving vibrator --- aircraft antenna compatibility
p0339 A78-35467
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
Objective measurement of voice channel intelligibility
[AD-A048611] p0248 N78-18264
Proposed methods and criteria for ATCRBS PRF assignment
[AD-A050050/4] p0360 N78-23074
RADIO FREQUENCY NOISE
U ELECTROMAGNETIC NOISE
RADIO FREQUENCY RADIATION
U RADIO WAVES
RADIO INTERFERENCE
U RADIO FREQUENCY INTERFERENCE
RADIO NAVIGATION
NT DECCA NAVIGATION
NT LORAN
NT LORAN C

NT TACAN
NT VHF OMNIRANGE NAVIGATION
An overview of enroute radio navigation services for civil aviation
[AIAA 77-1509] p0007 A78-12255
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
Considerations on the selection of a radionavigation system for the coasts of France
p0073 A78-16352
Inertially aided scanning DME for area navigation
p0110 A78-17899
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
Omega Navigation System - Present status and plans 1977-1980
p0112 A78-17916
New generation of radio navigation equipment
p0115 A78-18665
Observational computation in the case of redundant measurements --- for position sensor data in radio navigation systems
p0176 A78-23133
Optimal aperture-shape for an antenna array --- for radio navigation of flight vehicles
p0228 A78-27406
Evaluation of geometric performance of global positioning system
p0378 A78-37987
Two-channel method of processing interval codes --- for navigation systems
p0429 A78-43085
In-flight utilization of aircraft radio-navigation instruments --- Russian book
p0473 A78-44799
Onboard radio-navigation and landing aids for aircraft --- Russian book
p0473 A78-44806
Correlation of the errors of the Omega radio navigation system
p0475 A78-45118
Investigation of the accuracy of one-way range measurements --- for radio navigation systems
p0476 A78-45158
Navstar GPS field test results
p0530 A78-49856
The optimum shape of the aperture of an antenna array --- for radio navigation of aircraft
p0598 A78-53257
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
RADIO PROPAGATION
U RADIO TRANSMISSION
RADIO RANGES
U RADIO BEACONS
RADIO RECEIVERS
NT TRANSMITTER RECEIVERS
GDM/GPS receiver hardware implementation
p0062 A78-15589
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
EMC control of the tornado aircraft
p0384 A78-39087
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078
RADIO RELAY SYSTEMS
NT TIME DIVISION MULTIPLE ACCESS
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
A study of the economic impact of selected communications alternatives, present system definition
[AD-A052162] p0365 N78-23285
Earth-to-orbital station radio bridge
p0621 N78-33019
RADIO SIGNAL ATTENUATION
U RADIO ATTENUATION
RADIO SIGNAL PROPAGATION
U RADIO TRANSMISSION
RADIO SIGNALS
Suboptimal adaptive filtering of radio signals
p0601 A78-53903
RADIO TELEMETRY
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
RADIO TRACKING
Methodology questions involved in systems engineering for devising an optimum radio-engineering system for trajectory measurements --- of space vehicles
p0598 A78-53253
RADIO TRANSMISSION
NT IONOSPHERIC PROPAGATION
NT MICROWAVE ATTENUATION
NT MICROWAVE TRANSMISSION
NT MULTIPATH TRANSMISSION
NT SPREAD SPECTRUM TRANSMISSION
AH-1S high-survivable transmission system
[AD-A047558] p0307 N78-20123
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314
RADIO TRANSMITTERS
NT OMNIDIRECTIONAL RADIO RANGES
NT RADIO BEACONS
NT TRANSMITTER RECEIVERS
Filtering techniques in avionic transmitters
p0384 A78-39084
EMC control of the tornado aircraft
p0384 A78-39087
Portable earth station antenna study system
[AD-A054791] p0614 N78-32321
RADIO WAVES
NT CENTIMETER WAVES
NT MILLIMETER WAVES
NT RADIO EMISSION
NT SUBMILLIMETER WAVES
Ionospheric effects on satellite navigation and air traffic control systems
p0365 N78-23325
RADIOACTIVE ELEMENTS
U RADIOACTIVE ISOTOPES
RADIOACTIVE ISOTOPES
NT ZIRCONIUM 95
Automatic system employing radioactive radiation to level-out an aircraft at landing
p0216 A78-25011
RADIOACTIVE NUCLIDES
U RADIOACTIVE ISOTOPES
RADIOGRAPHY
Radiographic examination of T55 engine
[AD-A055108] p0564 N78-31113
RADIOMETERS
NT INFRARED DETECTORS
NT INFRARED RADIOMETERS
NT SPECTRORADIOMETERS
Effect of airstream velocity on mean drop diameters of water sprays produced by pressure and air atomizing nozzles --- for combustion studies
p0329 A78-33111
APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
An aircraft radiometer front end, addendum
[NASA-CR-157777] p0633 N78-33405
RADIONUCLIDES
U RADIOACTIVE ISOTOPES
RADOME MATERIALS
In-service performance of polyurethane and fluorocarbon rain erosion resistant radome coatings
p0219 A78-25205
Large electroformed nickel moulds for aircraft parts
p0508 A78-47267
RADOMES
Antenna fairings for flight vehicles /2nd revised and enlarged edition/ --- Russian book
p0598 A78-53426
Exploratory development of conductive coating materials --- for use on aircraft radomes
[AD-A048253] p0247 N78-18138

APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
RAFTS
NT LIFE RAFTS
RAIL TRANSPORTATION
The new railroad artery Paris-Sud-Est and high-speed trains: How the Paris Sud-Est was born - Basic options --- for high speed passenger trains
p0219 A78-25263
Numerical calculation of magnetic levitation systems
p0600 A78-53805
RAILROADS
U RAIL TRANSPORTATION
RAILS
Fatigue strength of the upper guide rail of the A-300 no. 4 landing flap support (tests, results, and evaluation)
[DLR-IB-152-77/09] p0038 N78-11057
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
RAIN
In-service performance of polyurethane and fluorocarbon rain erosion resistant radome coatings
p0219 A78-25205
RAINSTORMS
NT THUNDERSTORMS
RAMJET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
Modeling solid-fuel ramjet combustion
p0076 A78-16709
Ramjet propulsion for single-stage-to-orbit vehicles
[SAE PAPER 771011] p0182 A78-23843
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
A subsonic ramjet engine for expendable drones
[AIAA PAPER 78-962] p0463 A78-43522
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926
Review of problems in application of supersonic combustion
p0017 N78-10007
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
Combustor design and operation for a sub-scale turbojet test cell
[AD-A053791] p0455 N78-27134
Mixing and combustion in high speed air flows --- combustor design
[AD-A054398] p0503 N78-29188
Flame stabilization in a ramjet combustion chamber by means of a pilot gas generator
[DLR-FB-77-54] p0564 N78-31117
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
RANDOM ACCESS MEMORY
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
RANDOM DISTRIBUTIONS
U STATISTICAL DISTRIBUTIONS
RANDOM LOADS
NT GUST LOADS
Problems of rating the life of aircraft design elements in random loading
p0133 A78-20402
RANDOM PROCESSES
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182
Optimal aircraft simulator development by adaptive random search optimization
p0246 N78-18082
RANDOM VIBRATION
Practical experience in vibration testing external avionics systems
p0292 A78-32134
RANGE (EXTREMES)
NT FREQUENCY RANGES
RANGE AND RANGE RATE TRACKING
Aircraft tracking problems from range rate 'turbine modulation'
p0063 A78-15631
Multiple laser tracker operations
p0124 A78-19438
RANGE CONTROL
U TRAJECTORY CONTROL
RANGE FINDERS
NT LASER RANGE FINDERS
Investigation of the accuracy of one-way range measurements --- for radio navigation systems
p0476 A78-45158
A design of trajectory estimator using multiple DME range measurements
[AD-A055191] p0560 N78-31077
RANGE INDICATORS
U RANGE FINDERS
RANGE MEASUREMENT
U RANGEFINDING
RANGEFINDING
A comparative evaluation of modem techniques for simultaneous data and range measurement --- aircraft position location and data communication via satellite
[AIAA 77-1474] p0005 A78-12231
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
RANGES (FACILITIES)
NT BALLISTIC RANGES
NT TEST RANGES
RANGING
U RANGEFINDING
RAPCON (CONTROL)
U RADAR APPROACH CONTROL
RAPID TRANSIT SYSTEMS
International trends in airport construction
p0328 A78-32814
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
RARE EARTH ELEMENTS
Application of rare earth/transition metal permanent magnets to 400 Hz aircraft systems - An AF overview
p0535 A78-49935
RAREFACTION WAVES
U ELASTIC WAVES
RAREFIED GAS DYNAMICS
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857
The fluid dynamics of rarefied molecular flow over convex bodies - A new theory and applications
p0229 A78-27588
An analytic study of free molecule flow fields at the front and back edges of a plate
p0274 A78-28972
Local method in rarefied gas aerodynamics
p0380 A78-38726
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200
On the theory of drag calculation and profile optimization in shockless near free molecular flow
p0510 A78-47887
An algorithm for complex study of the aerodynamic characteristics of spacecraft
p0599 A78-53506
RATE METERS
U MEASURING INSTRUMENTS
RATES (PER TIME)
NT ACCELERATION (PHYSICS)
NT ACOUSTIC VELOCITY
NT AIRSPEED
NT ANGULAR VELOCITY
NT BURNING RATE
NT CRITICAL VELOCITY

NT CURRENT DENSITY
NT DECAY RATES
NT DECELERATION
NT EXHAUST VELOCITY
NT FLOW VELOCITY
NT FLUX DENSITY
NT GROUND SPEED
NT HIGH ACCELERATION
NT HIGH GRAVITY ENVIRONMENTS
NT HIGH SPEED
NT HYPERSONIC SPEED
NT LANDING SPEED
NT LOW SPEED
NT LUMINOUS INTENSITY
NT MAGNETIC FLUX
NT ROTOR SPEED
NT SOUND INTENSITY
NT SPIN REDUCTION
NT STRAIN RATE
NT SUBSONIC SPEED
NT SUPERSONIC SPEEDS
NT TIP SPEED
NT TRANSONIC SPEED
NT WIND VELOCITY
RATINGS
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
RATIOS
NT ASPECT RATIO
NT FROUDE NUMBER
NT FUEL-AIR RATIO
NT HIGH ASPECT RATIO
NT LIFT DRAG RATIO
NT LOW ASPECT RATIO
NT MACH NUMBER
NT PRANDTL NUMBER
NT REYNOLDS NUMBER
NT SIGNAL TO NOISE RATIOS
NT STANDING WAVE RATIOS
NT THICKNESS RATIO
NT THRUST-WEIGHT RATIO
RAYLEIGH DISTRIBUTION
L-band air-to-air multipath measurements --- for airborne collision avoidance systems
[AD-A045941] p0144 N78-14212
RB-57 AIRCRAFT
U B-57 AIRCRAFT
REACTION JETS
U JET FLOW
U JET THRUST
REACTION KINETICS
Project SQUID
[AD-A047076] p0199 N78-16056
REACTION TIME
A comparison of integrated and conventional cockpit warning systems --- pilot performance and reaction time in man machine systems
[AD-A048670] p0239 N78-18022
READING
The effects of eliminating minor graduations on dial reading performance
[AD-A046709] p0150 N78-15039
READJUSTMENT
U ADJUSTING
REAL GASES
Real-gas version of the gasdynamic formulas of Saint-Venant and Wantzel
p0570 A78-50304
REAL TIME OPERATION
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
A Navstar/GPS simulator
p0062 A78-15592
Performance monitor and data acquisition system for real-time embedded computers --- for F-111 avionics
p0064 A78-15636
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
Real-time digitally driven graphic-display systems in aircraft simulations
p0069 A78-15707
Development of an on-board minicomputer system
p0124 A78-19435
Multiple laser tracker operations
p0124 A78-19438
Observational computation in the case of redundant measurements --- for position sensor data in radio navigation systems
p0176 A78-23133
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
Real-time simulators for augmented inertial navigation systems
p0537 A78-49967
Research and development of digital jet-engine controls
p0578 A78-50626
Area navigation - Fast-time/real-time simulations in a high-altitude center environment
p0596 A78-52977
Palefac
[AD-A048331] p0244 N78-18065
Real time digital propulsion system simulation for manned flight simulators
[NASA-TM-78958] p0456 N78-27137
A design of trajectory estimator using multiple DME range measurements
[AD-A055191] p0560 N78-31077
Vortex advisory system simulation of Chicago O'Hare Airport
[AD-A057112] p0625 N78-33069
REAL VARIABLES
NT ASYMPTOTIC SERIES
NT DIFFERENTIAL EQUATIONS
NT EXTREMUM VALUES
NT GREEN FUNCTION
NT KERNEL FUNCTIONS
NT LINEAR EQUATIONS
NT MEASURE AND INTEGRATION
NT MINIMA
NT NONLINEAR EQUATIONS
NT NUMERICAL INTEGRATION
NT VORTICITY
REATTACHED FLOW
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896
The attachment of a ventilated plane jet to an inclined plane wall
p0600 A78-53764
Inverse boundary-layer theory and comparison with experiment
[NASA-TP-1208] p0615 N78-32385
RECEIVERS
NT RADAR RECEIVERS
NT RADIO RECEIVERS
RECEPTACLES (CONTAINERS)
U CONTAINERS
RECIPROCATING ENGINES
U PISTON ENGINES
RECIRCULATION
U CIRCULATION
RECIRCULATIVE FLUID FLOW
Modeling solid-fuel ramjet combustion
p0076 A78-16709
Combustion in gas turbine engines - A review of ONERA recent works
[ONERA, TP NO. 1978-25] p0386 A78-39580
A research on centrifugal compressor for small gas turbine - The effect of recirculating flow --- automobile engines
p0576 A78-50612
RECOGNITION
NT PATTERN RECOGNITION
NT SPEECH RECOGNITION
NT TARGET RECOGNITION
RECONNAISSANCE
NT AERIAL RECONNAISSANCE
A multi-sensor implementation for navigation, position location, position update, reconnaissance, and weapon delivery: AN/ARN-101(V)
p0315 N78-21082
RECONNAISSANCE AIRCRAFT
NT EARTH RESOURCES SURVEY AIRCRAFT
NT F-5 AIRCRAFT
NT F-1127 AIRCRAFT
NT U-2 AIRCRAFT

High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189
The RF-15: Reconnaissance derivative of the F-15
p0415 A78-40219
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
Logistics and operational effectiveness of the P-3 aircraft
[AD-A052239] p0404 N78-25050

RECORDING
NT DATA RECORDING
RECORDING INSTRUMENTS
NT FLIGHT LOAD RECORDERS
NT FLIGHT RECORDERS
NT OSCILLOGRAPHS
NT WEATHER DATA RECORDERS
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655

RECOVERABLE SPACECRAFT
NT SPACE SHUTTLES
RECOVERY PARACHUTES
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040

RECTANGULAR PANELS
Optimum structural design of sheet-stringer panels subjected to jet noise excitation
p0230 A78-27887

RECTANGULAR PLANFORMS
NT RECTANGULAR PANELS
NT RECTANGULAR PLATES
NT RECTANGULAR WINGS
The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013

RECTANGULAR PLATES
Inviscid supersonic flow about a thin rectangular plate
p0165 A78-20906

RECTANGULAR WINGS
Aerodynamic characteristics of a rectangular wing with a tip clearance in a channel
p0106 A78-17427
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
Uniqueness theorem for an integral equation of a rectangular thin-section wing
p0130 A78-20201
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
Flight measurements of the wing tip vortex
p0449 N78-27074
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051

RECTIFIERS
Electronic converter electric power supply /ECEPS/ - KC-135
[SAE PAPER 771003] p0181 A78-23837

RECUPERATORS
U REGENERATORS
REDUCED GRAVITY
Assess II - A simulated mission of Spacelab
p0569 A78-50276

REDUCTION (CHEMISTRY)
NT HYDROGENATION
REDUNDANCY
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
Sensor failure detection using analytical redundancy
p0182 A78-23862
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
Triplex digital fly-by-wire redundancy management techniques
[AIAA 78-1279] p0541 A78-50187

REDUNDANCY ENCODING
Fault-tolerant software for aircraft control systems
[NASA-CR-145298] p0251 N78-18797

REDUNDANT COMPONENTS
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Dual device redundancy management --- for RPV automatic flight control computer reliability
[AIAA 77-1441] p0015 A78-12695
System description and performance characteristics of a quad redundant strapdown inertial navigation and flight control system
p0065 A78-15641
Strapdown system redundancy management flight demonstration --- vertical takeoff and landing aircraft
[NASA-CR-145356] p0608 N78-32079
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101

REDUNDANT STRUCTURES
U REDUNDANT COMPONENTS
REENTRY
NT HYPERSONIC REENTRY
REENTRY BODIES
U REENTRY VEHICLES
REENTRY GLIDERS
U LIFTING REENTRY VEHICLES
REENTRY GUIDANCE
Simple numerical model for calculation of entry vehicle trim response
p0585 A78-51284

REENTRY SHIELDING
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759

REENTRY VEHICLES
NT LIFTING REENTRY VEHICLES
Simple numerical model for calculation of entry vehicle trim response
p0585 A78-51284
Hardened reentry vehicle development program. Erosion-resistant nosetip technology
[AD-A056390] p0630 N78-33128

REFERENCE SYSTEMS
Flight-control/navigation inertial reference system
p0065 A78-15642

REFERENCES (STANDARDS)
U STANDARDS
REFINING
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235

REFLECTANCE
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033

REFLECTION
NT INFRARED REFLECTION
NT WAVE REFLECTION
Investigation of ground reflection and impedance from flyover noise measurements

[NASA-CR-145302] p0251 N78-18874
REFLECTION COEFFICIENT
U REFLECTANCE
REFLECTIVITY
U REFLECTANCE
REFRACTION
NT ATMOSPHERIC REFRACTION
REFRACTORY MATERIALS
NT CHROMIUM
NT TANTALUM
NT TUNGSTEN ALLOYS
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 A78-24910
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
New materials for high temperature turbines; ONERA's DS composites confronted with blade problems
[NASA-TM-75216] p0087 N78-12085
REFRACTORY METAL ALLOYS
NT TUNGSTEN ALLOYS
REFRACTORY METALS
NT CHROMIUM
NT TANTALUM
REFRASIL (TRADEMARK)
U FIBERS
REFUELING
NT AIR TO AIR REFUELING
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
REGENERATION (ENGINEERING)
Choice of cycle for a regenerative bypass turbojet for long-range aircraft
p0527 A78-49723
REGENERATIVE CYCLES
U REGENERATION (ENGINEERING)
REGENERATORS
The development of a regenerator seal for vehicular use --- for automatic gas turbine engines
p0574 A78-50587
Aluminous keatite - A durable ceramic material for rotary regenerator cores --- for automotive gas turbine engines
p0574 A78-50588
REGIONAL PLANNING
NT URBAN PLANNING
Airport choice in low demand region
p0229 A78-27547
Formulation of Iowa State airport system
p0229 A78-27548
The airport city and the future intermodal transportation system --- Book
p0336 A78-34724
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
REGIONS
NT ARCTIC REGIONS
NT REMOTE REGIONS
REGRESSION (STATISTICS)
U REGRESSION ANALYSIS
REGRESSION ANALYSIS
NT REGRESSION COEFFICIENTS
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
Improvement of flight measuring data with a Kalman filter
[BMVG-FBWT-77-6] p0243 N78-18057
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094
REGRESSION COEFFICIENTS
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
REGULATION
U CONTROL
REGULATIONS
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
Status report on aircraft noise certification
p0340 A78-35652
And now 'the deregulators' - When will they learn
p0582 A78-51127
British-Airways v. Port Authority - Its impact on aircraft noise regulation
p0582 A78-51128
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
The changing environment of international air commerce
p0592 A78-52448
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624
REGULATORS
NT FREQUENCY CONTROL
NT FUEL FLOW REGULATORS
NT PRESSURE REGULATORS
NT RELIEF VALVES
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
Output feedback regulator design for jet engine control systems
p0215 A78-24898
Optimal regulator or conventional? Setup techniques for a model following simulator control system
p0357 N78-23020
REIGNITION
U IGNITION
REINFORCED MATERIALS
U COMPOSITE MATERIALS
REINFORCED PLASTICS
NT GLASS FIBER REINFORCED PLASTICS
Braiding composites - Adapting the process for the mass production of aerospace components
p0077 A78-16904
Selecting plastics for aircraft applications
p0232 A78-28374
Determination of the principal mechanical properties of reinforced plastic laminates for aircraft
[AD-A043350] p0044 N78-11201
A general study of hybrid composite laminates --- airframe materials
[AD-A048364] p0266 N78-19208
Studies on reinforced plastics --- boron fiber composites
[AAAP-NT-77-40] p0355 N78-22240
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures
p0444 N78-26475
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
Damping, static, dynamic, and impact characteristics of laminated beams typical of windshield construction
[AD-A054463] p0548 N78-30093
REINFORCED PLATES
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
Integrally stiffened laminate construction
p0370 A78-36431
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
REINFORCED SHELLS
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443

Cutout reinforcement of stiffened cylindrical shells
[AIAA 78-512] p0279 A78-29811
REINFORCEMENT (STRUCTURES)
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
Cutout reinforcement of stiffened cylindrical shells
[AIAA 78-512] p0279 A78-29811
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
REINFORCING FIBERS
NT CARBON FIBERS
Applications of carbon fibre composites in commercial aircraft
p0105 A78-17253
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings --- rings and loops, safety belts and one-way load equipment
[DLR-IB-152-75/25] p0044 N78-11204
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
FRS composites for advanced gas turbine engine components
[AD-A050595] p0355 N78-22165
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures
p0444 N78-26475
The prospects for composites based on boron fibers
[NASA-TM-75305] p0457 N78-27185
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
RELATIONSHIPS
NT STRESS-STRAIN RELATIONSHIPS
RELAXATION (MECHANICS)
NT STRESS RELAXATION
Minimisation of relaxation drag
p0374 A78-37423
RELAXATION METHOD (MATHEMATICS)
Application of a multi-level grid method to transonic flow calculations
p0011 A78-12296
Transonic relaxation methods
p0011 A78-12299
Numerical methods for structural analysis
p0328 A78-33003
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
RELIABILITY
NT AIRCRAFT RELIABILITY
NT COMPONENT RELIABILITY
NT STRUCTURAL RELIABILITY
Technical evaluation report on the 49th(B) Propulsion and Energetics Specialists Meeting on Power Plant Reliability
[AGARD-AR-110] p0141 N78-14048
Reliability, Improvement Warranty (RIW) mid contract evaluation
[AD-A048244] p0250 N78-18441
RELIABILITY ANALYSIS
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
Life cycle testing for avionics development
p0060 A78-15557
Development of a combined environment test for reliability assessment of avionics systems
p0061 A78-15561
Detection of sensor failure and output reconstruction for aircraft engine controls
[AIAA PAPER 78-4] p0157 A78-20627
Advanced turboprop propulsion system reliability and maintenance cost
[SAE PAPER 771009] p0182 A78-23841
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
A test using simulated mission profile environments --- Airborne Instrumentation Subsystem pod reliability
p0291 A78-32126
The certification of light aircraft
p0369 A78-36280
Reliability of aviation techniques and flight safety --- Russian book
p0371 A78-36494
The determination of margins of safety for critical aircraft systems --- electromagnetic interference effects on flight and engine controls
p0384 A78-39082
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
Experimental determination of a more powerful burn-in
p0481 A78-46321
Reliability of inertial navigation systems --- for military and commercial aircraft
p0537 A78-49968
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 2: Detailed report
[AD-A051319] p0396 N78-24119
RELIABILITY CONTROL
U QUALITY CONTROL
U RELIABILITY ENGINEERING
RELIABILITY ENGINEERING
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Dual device redundancy management --- for RPV automatic flight control computer reliability
[AIAA 77-1441] p0015 A78-12695
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Designing the elements of a structure of a given guaranteed indestructibility
p0131 A78-20259
Distribution of reliability characteristics among aircraft units to ensure a given flight-safety level
p0174 A78-22639
Integrity in flight control systems
p0182 A78-23873
The AN/ARC-164 radio - Life-cycle-cost savings --- UHF communication equipment reliability and maintainability improvement
p0276 A78-29479
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
The products-liability movement has improved aviation safety
p0335 A78-34644

Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
Distribution of reliability characteristics among airplane system units to ensure given flight safety level
p0518 A78-48221
Comparisons of high anti-jam design techniques for GPS receivers --- Global Positioning System
p0530 A78-49857
Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
Triplex digital fly-by-wire redundancy management techniques
[AIAA 78-1279] p0541 A78-50187
Improved safety in air transportation through the extension and automation of flight safety systems
p0569 A78-50264
Improving reliability of avionics equipments through engineering testing
[AD-A042454] p0024 N78-10064
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
Materials and manufacturing processes for increased life/reliability --- of turbine wheels
p0027 N78-10086
Turbine disks for improved reliability
p0027 N78-10089
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079
RELIEF VALVES
Mechanical characteristics of stability-bleed valves for a supersonic inlet --- for the YF-12 aircraft
[NASA-TM-X-3483] p0098 N78-13063
REMELTING
U MELTING
REMOTE CONTROL
NT RADIO CONTROL
Remote maintenance monitor systems --- for air navigation equipment
p0111 A78-17911
REMOTE REGIONS
NT ARCTIC REGIONS
Remoteness-compensation methodology for benefit/cost establishment and discontinuance criteria
[AD-A043836] p0201 N78-16074
REMOTE SENSORS
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
Solution of multitarget, multisensor tracking problems on the Illiac IV parallel processor
p0113 A78-18063
Remote sensing of aircraft wake vortex movement in the airport environment --- aircraft exhaust products tracking
[APCA PAPER 77-41,4] p0220 A78-25385
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed sensors --- German book
p0228 A78-27383
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
A spectroradiometer for airborne remote sensing --- for geological, vegetation and hydrological mapping
p0298 A78-32396
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
Simultaneous sensor-presentation techniques study --- for attack aircraft
[AD-A043355] p0024 N78-10066
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports
[UTIAS-TN-216] p0403 N78-24755
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
REMOTELY PILOTED VEHICLES
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
Dual device redundancy management --- for RPV automatic flight control computer reliability
[AIAA 77-1441] p0015 A78-12695
The APIT remotely piloted vehicle
p0050 A78-13450
RPV video digital multiplexing system
p0063 A78-15613
Remotely piloted aircraft in the civil environment
p0070 A78-16100
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
Design and analysis of propellers for low Reynolds number application to mini-RPV's
[SAE PAPER 770999] p0181 A78-23834
Display augmentation in manual control of remotely piloted vehicles
p0231 A78-28148
Remotely piloted aircraft in the civil environment
p0283 A78-30506
The problem of choosing design parameters for unpiloted flight-vehicles --- control configured optimization
p0292 A78-32258
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
Grumman's radio-controlled experimental air force
p0379 A78-38522
Aircraft operating environments around high speed ships --- RPV feasibility for hydrofoil ships
[AIAA PAPER 78-1184] p0422 A78-41877
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
Guidance and control problems in semiautomatic recovery of the Aquila RPV
[AIAA 78-1272] p0540 A78-50182
The evolution of a remotely piloted vehicle microprocessor flight control system
[AIAA 78-1273] p0541 A78-50183
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles --- German thesis
p0592 A78-52498
An approach guidance system for remotely-piloted vehicles
[AD-A041561] p0022 N78-10043
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
The XBQM-108A vertical attitude takeoff and landing vehicle
[AD-A044754] p0085 N78-12074
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051
Engines for small propeller-driven RPVs, report of Sub-Group A of AGARD Working Group on Propulsion and Power Supplies for unmanned vehicles, volume 1
[AGARD-AR-101-VOL-1] p0151 N78-15054
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
Design and evaluation of a side force generator modification for the XBQM-1 remotely piloted vehicle

[AD-A048901] p0260 N78-19122
The AS 350 light helicopter
p0263 N78-19140
Westland Wisp
p0264 N78-19149
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104
The design and simulation of a takeoff stabilization system for an aircraft with an air cushion landing system
[AD-A053220] p0440 N78-26137
RENDEZVOUS GUIDANCE
Mutual counteraction of two moving objects. I --- remote optimal encounter guidance
p0338 A78-34960
REPAIRING
U MAINTENANCE
REPLACING
Replacement process analysis: An interim report on replacement models
[AD-A052411] p0399 N78-24150
REPORT GENERATORS
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
REPORTS
NT CONGRESSIONAL REPORTS
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536
Project SQUID
[AD-A047076] p0199 N78-16056
REPUBLIC AIRCRAFT
NT A-10 AIRCRAFT
REPUBLIC MILITARY AIRCRAFT
U MILITARY AIRCRAFT
REPUBLIC OF CHINA
U CHINA
RESCUE OPERATIONS
Survival after a crash
p0072 A78-16280
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
Omega ambiguity resolution techniques
p0111 A78-17913
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
Air-sea rescue operations. Search and rescue experience
p0262 N78-19134
Special study: Emergency locator transmitters, an overview
[NTSB-AAS-78-1] p0314 N78-21063
RESEARCH
NT DYNAMIC PROGRAMMING
NT GAME THEORY
NT LINEAR PROGRAMMING
NT MARKET RESEARCH
NT NONLINEAR PROGRAMMING
NT OPERATIONS RESEARCH
RESEARCH AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
NT HP-115 AIRCRAFT
NT U-2 AIRCRAFT
NT X-22 AIRCRAFT
NT X-24 AIRCRAFT
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Some opportunities in the development of light aircraft
p0112 A78-18036
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
Aerodynamic interference effects on tilting proprotor aircraft --- using the Green function method
[NASA-CR-152053] p0092 N78-13007
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Tabulated pressure measurements of a NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2634] p0393 N78-24077
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Wind-tunnel measurements of aerodynamic load distribution on an NASA supercritical-wing research airplane configuration
[NASA-TM-X-2469] p0393 N78-24079
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
An adaptive learning control system for aircraft
[NASA-CR-156930] p0413 N78-25966
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter model employing a strake-wing concept
[NASA-TM-74071] p0437 N78-26103
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055
Overview of the NASA YF-12 program
p0605 N78-32056
RESEARCH AND DEVELOPMENT
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
The year for shaping a digital operations R&D program --- for ATC
p0231 A78-28218
Integrated controls for a new aircraft generation
p0231 A78-28219
Coming cockpit avionics
p0231 A78-28220
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
Flight mechanics today and tomorrow - Balance and perspectives --- aircraft design, control and dynamics simulation
p0337 A78-34942
10 years of contract research for the pump/compressor industrial concern

p0523 A78-49175
The potential of advanced technology for aircraft structures /10th J. D. North Memorial Lecture/
p0570 A78-50400
Recent status on research and development of PJR 710 turbofan engine --- for subsonic civil transport aircraft
p0573 A78-50577
Research and development of digital jet-engine controls
p0578 A78-50626
Naval structural materials - Requirements, issues, and opportunities
p0583 A78-51149
Bibliography of Lewis Research Center technical contributions announced in 1976
[NASA-TM-73860] p0213 N78-17921
Army aviation RDT and E plan, sixth edition
[AD-A049214] p0271 N78-20010
Army research and technology laboratories, FY 1977
[AD-A049212] p0271 N78-20011
Army aviation RDT and E plan. Sixth edition: Executive summary
[AD-A049213] p0271 N78-20012
Bibliography of Lewis Research Center technical publications announced in 1977
[NASA-TM-78918] p0496 N78-28986
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
Future needs and opportunities in the air traffic control system
[GPO-98-931] p0559 N78-31076
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911
Translations on USSR science and technology: Physical science and technology, no. 42
[JPRS-71612] p0621 N78-33015
Translations on USSR science and technology: Physical science and technology, no. 44
[JPRS-71659] p0621 N78-33024

RESEARCH FACILITIES
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
Unsteady loads due to propulsive lift configurations. Part D: The development of an experimental facility for the investigation of scaling effects on propulsive lift configurations
[NASA-CR-156123] p0300 N78-20070

RESEARCH MANAGEMENT
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
New structuralization and work of current interest in the research area of fluid mechanics --- propulsion systems, aerodynamics and acoustics
p0337 A78-34941
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105

RESEARCH VEHICLES
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle
p0263 N78-19144

RESIDENTIAL AREAS
Concorde noise-induced building vibrations: International Airport Dulles --- studies by Langley Research Center
[NASA-TM-74083] p0032 N78-10839
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615

RESIDUAL STRESS
The damage sum in fatigue of structure components
p0226 A78-26834
Formation of residual stresses in the thermal strengthening of gas-turbine engine components
p0426 A78-42740
Application of X-ray diffraction stress measuring techniques --- to aircraft structures
p0443 N78-26467
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction --- fatigue life of aircraft construction materials
[BMVG-FBWT-77-23] p0555 N78-30603

RESINS
NT EPOXY RESINS
NT KEVLAR (TRADEMARK)
NT POLYIMIDE RESINS
NT POLYURETHANE RESINS
NT THERMOPLASTIC RESINS
ALC/50/ values for some polymeric materials --- Apparent Lethal Concentration fire toxicity
p0371 A78-36596

RESISTIVITY
U ELECTRICAL RESISTIVITY

RESOLUTION
NT ANGULAR RESOLUTION
NT HIGH RESOLUTION
NT RADAR RESOLUTION

RESONANCE
NT NUCLEAR MAGNETIC RESONANCE
NT RESONANT VIBRATION

RESONANCE TESTING
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268

RESONANT FREQUENCIES
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
Natural frequencies of a soft heavy cylindrical shell under the effect of internal pressure
p0580 A78-50717
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
Dynamic nondestructive testing of materials
p0444 N78-26470
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures
p0444 N78-26475

RESONANT VIBRATION
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146

RESOURCES
NT CRUDE OIL
NT FOSSIL FUELS

RESOURCES MANAGEMENT
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073

RESPONDERS
U TRANSPONDERS

RESPONSES
NT DYNAMIC RESPONSE
NT MODAL RESPONSE
NT TRANSIENT RESPONSE

RESTRAINTS
U CONSTRAINTS

RETARDANTS
NT FLAME RETARDANTS

RETIREMENT
Factors affecting the retirement of commercial transport jet aircraft
[NASA-CR-152115] p0316 N78-21092

RETRACTABLE LANDING GEAR
U LANDING GEAR

RETRIEVAL
NT INFORMATION RETRIEVAL
RETROFITTING
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
An example of additive damping as a cost savings alternative to redesign --- turbofan engine inlet development
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
The shape of airliners to come
p0589 A78-51817
RETROROCKET ENGINES
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
REUSABLE LAUNCH VEHICLES
NT SINGLE STAGE TO ORBIT VEHICLES
REUSABLE SPACECRAFT
NT SINGLE STAGE TO ORBIT VEHICLES
NT SPACE SHUTTLES
REVERSE TIME
U REACTION TIME
REVERSED FLOW
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime
p0187 A78-24275
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
REVISIONS
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28
[NASA-TM-73250] p0079 N78-12011
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
REYNOLDS NUMBER
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
An intermittent high-Reynolds-number wind tunnel
p0130 A78-20193
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090
An intermittent high Reynolds number wind tunnel
[AIAA 78-766] p0293 A78-32327
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
Motion of the solid phase of an aerosol at large Reynolds numbers
p0334 A78-34421
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
On an acoustic field generated by subsonic jet at low Reynolds numbers
[NASA-CR-156182] p0356 N78-22858
Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and comparison with other data
[NASA-TM-72855] p0405 N78-25055
Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
M=3 turbulent boundary layer measurements at very high Reynolds numbers --- supersonic wind tunnel tests
[AD-A055952] p0607 N78-32072
REYNOLDS STRESS
M=3 turbulent boundary layer measurements at very high Reynolds numbers --- supersonic wind tunnel tests
[AD-A055952] p0607 N78-32072
RF-8 AIRCRAFT
U F-8 AIRCRAFT
RH-2 HELICOPTER
U UH-1 HELICOPTER
RHEOELECTRICAL SIMULATION
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
RIBS (SUPPORTS)
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
RICHARDSON-DUSHMAN EQUATION
U TEMPERATURE EFFECTS
RIDING QUALITY
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Ride quality flight testing
p0226 A78-26795
Comparative vibration environments of transportation vehicles
p0331 A78-33442
Ride technology applications to large passenger aircraft
p0331 A78-33443
Concorde - Ride quality and passenger reactions
p0418 A78-41166
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
Model of aircraft passenger acceptance
p0526 A78-49684
Ride characteristics of catamaran sea loiter aircraft in a seaway
[AD-A045363] p0096 N78-13048
Analytical study of ride smoothing benefits of control system configurations optimized for pilot handling qualities
[NASA-TP-1148] p0246 N78-18076
Open loop gust alleviation --- exemplified for DO-28 aircraft
[BMFT-FB-W-77-22] p0353 N78-22114
Aircraft ride-bumpiness and the design of ride-smoothing systems
p0431 N78-26053
Flight control system design for ride qualities of highly maneuverable fighter aircraft
p0431 N78-26054
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111

RIEMANN INTEGRAL
U MEASURE AND INTEGRATION
RIGID BODIES
U RIGID STRUCTURES
RIGID ROTOR HELICOPTERS
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
RIGID ROTORS
A theoretical technique for analyzing aeroelastic stability of bearingless rotors
[AIAA 78-503] p0279 A78-29805
IDS - An advanced hingeless rotor system
p0372 A78-36950
Helicopter rotor vibration isolation
p0524 A78-49399
Natural vibrations of a rigid rotor mounted on elastic ball bearings
p0582 A78-51015
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
The Advancing Blade Concept (ABC) rotor program
p0263 N78-19143
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
RIGID STRUCTURES
NT RIGID ROTORS
NT RIGID WINGS
Design of load-bearing structures of maximal rigidity
p0129 A78-19707
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278
RIGID WINGS
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
RIGIDITY
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
RING LASERS
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
RING STRUCTURES
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings --- rings and loops, safety belts and one-way load equipment
[DLR-IB-152-75/25] p0044 N78-11204
RINGS
Turbine engine slip ring technology - A survey --- for aircraft
[SAE PAPER 770976] p0179 A78-23820
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
Analysis of a high speed ring valve system for a single cylinder reciprocating compressor
p0633 N78-33442
RISK
Engine non-containment: UK risk assessment methods
p0025 N78-10072
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
ROADS
NT HIGHWAYS
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
ROCKET ENGINE DESIGN
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
ROCKET ENGINES
NT RETROROCKET ENGINES
NT SOLID PROPELLANT ROCKET ENGINES
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
ROCKET EXHAUST
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134
ROCKET FLIGHT
Optimization of the design parameters of finned pilotless flight vehicles
p0293 A78-32269
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270
ROCKET NOZZLES
NT DUAL THRUST NOZZLES
ROCKET PROPELLANTS
NT SLURRY PROPELLANTS
NT SOLID ROCKET PROPELLANTS
ROCKET SONDES
U SOUNDING ROCKETS
ROCKET TEST FACILITIES
Some applications of a test track for aerodynamic testing
[AIAA PAPER 78-167] p0160 A78-20719
ROCKET VEHICLES
NT SOUNDING ROCKETS
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
Rocket structures
p0612 N78-32123
ROCKET-BORNE INSTRUMENTS
Estimated temperature corrections for the Menaka-II meteorological rocket payload
p0479 A78-45341
ROCKOONS
Small ballooning serves the Navy
p0004 A78-12174
RODS
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
ROGALLO WINGS
U FLEXIBLE WINGS
ROLL
Effect of a nonconstant C/m-alpha/ on the stability of rolling aircraft
p0071 A78-16180
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061
ROLL CONTROL
U LATERAL CONTROL
ROLL FORMING
Basic problem of control of the motion of a

non-Newtonian fluid in a gap --- roll forming of aircraft plastics
p0292 A78-32257
ROLLER BEARINGS
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
Investigation of the heat regime of gas turbine engine bearings --- Russian book
p0598 A78-53431
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
Critical inspection of bearings for life extension
p0444 N78-26472
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
ROLLING CONTACT LOADS
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B
[DLR-IB-152-77/11] p0038 N78-11058
ROLLING MOMENTS
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
Constant-control rolling maneuver
p0507 A78-46961
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173
ROLLUP SOLAR ARRAYS
U SOLAR ARRAYS
ROOMS
Pressure inside a room subjected to sonic boom
[UTIAS-TN-207] p0345 N78-22029
ROOT-MEAN-SQUARE ERRORS
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
ROTARY DRIVES
U MECHANICAL DRIVES
ROTARY STABILITY
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
Dynamic stability of a two blade rotor
[ONERA, TP NO. 1978-32] p0291 A78-32037
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity --- rotor precession in steam turbines
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066
ROTARY WING AIRCRAFT
NT AH-64 HELICOPTER
NT BO-105 HELICOPTER
NT CH-47 HELICOPTER
NT CH-62 HELICOPTER
NT H-53 HELICOPTER
NT H-54 HELICOPTER
NT HEAVY LIFT HELICOPTERS
NT HELICOPTERS
NT MILITARY HELICOPTERS
NT OH-6 HELICOPTER
NT OH-58 HELICOPTER
NT RIGID ROTOR HELICOPTERS
NT SE-3160 HELICOPTER
NT SH-3 HELICOPTER
NT TILT ROTOR AIRCRAFT
NT UH-1 HELICOPTER
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
NT XV-15 AIRCRAFT
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand
p0333 A78-34161
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
Rotorcraft Design
[AGARD-CP-233] p0261 N78-19126
US Navy/Marine Corps rotary wing requirements
p0262 N78-19132
Tethered RPV-rotorcraft
p0263 N78-19141
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle
p0263 N78-19144
DFVLR rotorcraft research
p0263 N78-19146
Research Requirements for the improvement of helicopter operations
p0263 N78-19147
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 2: Detailed report
[AD-A051319] p0396 N78-24119
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091
ROTARY WINGS
NT BEARINGLESS ROTORS
NT LIFTING ROTORS
NT RIGID ROTORS
NT TILTING ROTORS
NT TIP DRIVEN ROTORS
The analysis of helicopter rotor noise
p0059 A78-15295
Design and fabrication of an improved performance, low cost, composite main rotor blade for the Cobra helicopter
p0077 A78-16906
The use of composites in class 1 structures in helicopters --- for rotor blades
p0105 A78-17254
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
DFVLR studies on rotary-wing flight mechanics
p0114 A78-18502
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes --- for helicopters
p0126 A78-19639
Coatings for fretting prevention
p0178 A78-23441
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
The helicopter as a control object --- Russian book
p0276 A78-29401
Helicopters: Calculation of integral aerodynamic performance and air-technical data --- Russian book
p0281 A78-30124
Dynamic stability of a two blade rotor
[ONERA, TP NO. 1978-32] p0291 A78-32037

Flight evaluation of helicopter rotor isolation system
p0331 A78-33445
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
The quest for new technologies in the helicopter field
p0339 A78-35325
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Compressible flow about helicopter rotors
p0372 A78-36947
A theoretical study of the effect of blade ice accretion on the power-off landing capability of a Wessex helicopter
p0372 A78-36948
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
IDS - An advanced hingeless rotor system
p0372 A78-36950
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
Deformation curve of rotary airfoil blades
p0386 A78-39540
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
Measurement of vibratory displacements of a rotating blade
p0524 A78-49397
Helicopter rotor vibration isolation
p0524 A78-49399
Minimum on-axis noise for a propeller or helicopter rotor
p0590 A78-51949
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
Investigation of the compliant rotor concept
[AD-A042338] p0022 N78-10051
Feasibility analysis for a microwave deicer for helicopter rotor blades
[AD-A042581] p0022 N78-10052
An analysis of the flutter and damping characteristics of helicopter rotors
p0030 N78-10111
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053
Icing problems on helicopter rotors
[BR59303] p0140 N78-14032
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 1: Materials, design and test
[AD-A046176] p0140 N78-14037
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process specifications
[AD-A046279] p0149 N78-15032
An assessment of some forms of follower-tooth reduction gear and its application to helicopter main rotor gearboxes
[RAE-TR-77040] p0150 N78-15035
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2 --- tabulated test results
[NASA-CR-2915] p0203 N78-16998
Aerospatiale is ready to develop a convertiplane with tethering rotors
[NASA-TM-75038] p0206 N78-17042
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Modern concepts for aerodynamic rotor design
[DLR-IB-151-77/11] p0243 N78-18058
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
Long term experience with a hingeless/composite rotor
p0262 N78-19137
An experimental investigation of oscillating flows over an airfoil --- rotary wings
p0299 N78-20058
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Comparison of measured and calculated helicopter rotor impulsive noise --- wind tunnel test data and prediction analysis techniques
[NASA-TM-78473] p0311 N78-20917
Acoustical effects of blade tip shape changes on a full scale helicopter rotor in a wind tunnel
[NASA-CR-152082] p0311 N78-20918
HLH rotor blade manufacturing technology development report
[AD-A050592] p0349 N78-22081
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
A technique for monitoring flight-test envelope expansion
[AD-A051163] p0361 N78-23083
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 1: Summary report
[AD-A051318] p0396 N78-24118
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 2: Detailed report
[AD-A051319] p0396 N78-24119
Heavy lift helicopters. Advanced Technology component program: Hub and upper controls
[AD-A051348] p0396 N78-24122
Vibrations of a helicopter rotor blade using finite element unconstrained variational formulations
[AD-A052670] p0397 N78-24125
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
A brief survey of rotary wing induced-velocity theory
[NASA-TM-78741] p0450 N78-27085
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
A subjective field study of helicopter blade-slap noise
[NASA-TM-78758] p0494 N78-28680
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
Heavy lift helicopter - advanced technology component program - rotor blade

[AD-A053423] p0499 N78-29089
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
Experimental investigation of gust response of hingeless helicopter rotors
[AD-A054752] p0552 N78-30142
The transonic flow on a helicopter rotor
p0557 N78-31042
Antitorque training: Evaluation of effectiveness in reducing mishap losses
[AD-A055040] p0561 N78-31092
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
Prediction and reduction of rotor broadband noise
p0619 N78-32821
Theoretical models of helicopter rotor noise
p0619 N78-32822
Noise due to rotor-turbulence interaction
p0619 N78-32823
Theory on acoustic sources
p0619 N78-32824
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise --- langley anechoic noise facility
p0620 N78-32827
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
Helicopter external noise prediction and correlation with flight test
p0620 N78-32829
Full-scale testing of an Ogee tip rotor --- in the Langley whirl tower
p0620 N78-32830
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
Improved methods for calculating the thickness noise
p0620 N78-32832
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
A study of the noise radiation from four helicopter rotor blades --- tests in Ames 40 by 20 foot wind tunnel
p0621 N78-32835
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085

ROTATING BODIES
NT BEARINGLESS ROTORS
NT COMPRESSOR ROTORS
NT HELICOPTER TAIL ROTORS
NT IMPELLERS
NT LIFTING ROTORS
NT RIGID ROTORS
NT ROTARY WINGS
NT ROTATING CYLINDERS
NT ROTATING DISKS
NT ROTORS
NT TAIL ROTORS
NT TILTING ROTORS
NT TIP DRIVEN ROTORS
NT TURBINE WHEELS
Investigations on unsteady pressure distribution measurements in rotating systems
[DLR-FB-77-43] p0566 N78-31135

ROTATING CYLINDERS
Basic problem of control of the motion of a non-Newtonian fluid in a gap --- roll forming of aircraft plastics
p0292 A78-32257

ROTATING DISKS
Steady-state unbalance response of a three-disk flexible rotor on flexible, damped supports
p0275 A78-29326
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101

ROTATING FLUIDS
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997

ROTATING GENERATORS
NT AC GENERATORS
NT TURBOGENERATORS
Constant speed generating systems --- for aircraft electric power supply
[SAE PAPER 771001] p0181 A78-23835
A study of the effect of the rotor coil couplings of a synchronous machine on its predicted transient response
p0632 N78-33330

ROTATING MIRRORS
Elastic deformations of rapidly-rotating prismatic mirrors
p0168 A78-21374

ROTATING SHAFTS
NT SHAFTS (MACHINE ELEMENTS)
NT TURBOSHAFTS
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595

ROTATING STALLS
Determination of the type of rotating stall in an axial compressor stage
p0131 A78-20255
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091

ROTATING VEHICLES
U ROTATING BODIES
U VEHICLES

ROTATION
NT AUTOROTATION

ROTATIONAL FLOW
U FLUID FLOW
U VORTICES

ROTOR AERODYNAMICS
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
DFVLR studies on rotary-wing flight mechanics
p0114 A78-18502
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes --- for helicopters
p0126 A78-19639
Computation of inductive velocity in the plane of a lightly loaded lifting propeller
p0127 A78-19658
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
Helicopters: Calculation of integral aerodynamic performance and air-technical data --- Russian book
p0281 A78-30124
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand

p0333 A78-34161
Compressible flow about helicopter rotors
p0372 A78-36947
A theoretical study of the effect of blade ice accretion on the power-off landing capability of a Wessex helicopter
p0372 A78-36948
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
Progress in propeller aerodynamics
p0507 A78-47173
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611
Search-method optimization of the balancing of flexible rotors of gas turbine engines
p0581 A78-50795
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
Inviscid flow through wide-angle diffuser with actuator disk --- for wind turbine augmentation
p0597 A78-53095
Investigation of the compliant rotor concept
[AD-A042338] p0022 N78-10051
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
Modern concepts for aerodynamic rotor design
[DLR-IB-151-77/11] p0243 N78-18058
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
The theoretical performance of a straight-bladed, vertical axis wind turbine
[ATN-7802] p0445 N78-26561
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111

ROTOR BLADES
OTTAS/HLH rotor blade fabrication and testing --- YUH-61A and XCH-62A helicopters
p0050 A78-13456
Studies to gain insight into the complexities of blade vibration phenomena
p0058 A78-15175
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
Holographic inspection of jet engine composite fan blades
[SAE PAPER 770975] p0179 A78-23819
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 1: Materials, design and test
[AD-A046176] p0140 N78-14037
The Advancing Blade Concept (ABC) rotor program
p0263 N78-19143
ONERA aerodynamic research work on helicopters
p0264 N78-19148
HLH rotor blade manufacturing technology development report
[AD-A050592] p0349 N78-22081
Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] p0402 N78-24515
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071

ROTOR BLADES (TURBOMACHINERY)
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
The state of development of ceramic components for gas turbines
[DGLR PAPER 77-072] p0116 A78-18703
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
Wake cutting experiments --- turbulent wake-blade (airfoil) interaction
p0336 A78-34843
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
Computer aided design of radial gas turbines - A method for determining the overall rotor dimensions
p0419 A78-41509
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Operational experience with long-safe-life gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
Investigation of flow in centrifugal impeller with tandum inducer
p0577 A78-50614
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618
Blade fragment energy analysis
p0025 N78-10074
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Design of rotors for improved structural life
p0027 N78-10085
Some airline experience in preventing engine rotor failures
p0027 N78-10090
Improved resistance to engine bird ingestion
[AD-A044203] p0041 N78-11105
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
An analysis of the rotor blade stresses of the three stage compressor of the Ames Research Center 11- by 11-foot transonic wind tunnel
[NASA-CR-152083] p0209 N78-17061

Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
A note on multicyclic control by swashplate oscillation
[NASA-TM-78475] p0323 N78-21159
In-place recalibration technique applied to a capacitance-type system for measuring rotor blade tip clearance
[NASA-TP-1110] p0352 N78-22101
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
Experimental study on blade bending vibration
[CUED/A-TURBO/TR-88] p0361 N78-23090
Acoustic evaluation of a novel swept-rotor fan --- noise reduction in turbofan engines
[NASA-TM-78878] p0403 N78-24897
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
The theoretical performance of a straight-bladed, vertical axis wind turbine
[ATN-7802] p0445 N78-26561
Performance with and without inlet radial distortion of a transonic fan stage designed for reduced loading in the tip region
[NASA-TP-1294] p0545 N78-30057
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106

ROTOR DISKS
U TURBINE WHEELS

ROTOR HUBS
U HUBS
U ROTORS

ROTOR LIFT
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022

ROTOR SPEED
Transient speed response of a gas turbine
p0122 A78-19229

ROTORCRAFT
U ROTARY WING AIRCRAFT

ROTORCRAFT AIRCRAFT
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation
[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044

ROTORS
NT BEARINGLESS ROTORS
NT COMPRESSOR ROTORS
NT HELICOPTER TAIL ROTORS
NT IMPELLERS
NT LIFTING ROTORS
NT RIGID ROTORS
NT ROTARY WINGS
NT TAIL ROTORS
NT TILTING ROTORS
NT TIP DRIVEN ROTORS
NT TURBINE WHEELS
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
Steady-state unbalance response of a three-disk flexible rotor on flexible, damped supports
p0275 A78-29326
Rotor-stator interaction noise with hindsight --- turbomachine acoustics
p0329 A78-33093
Report on aircraft engine containment
[SAE AIR 1537] p0472 A78-44705
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Rotor burst protection criteria and implications
p0025 N78-10071
Engine non-containment: UK risk assessment methods
p0025 N78-10072
Types of rotor failure and characteristics of fragments
p0025 N78-10073
Approaches to rotor fragment protection
p0026 N78-10076
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
NDE: A key to engine rotor life prediction
p0027 N78-10087
Influence of oil-squeeze-film damping on steady-state response of flexible rotor operating to supercritical speeds
[NASA-TP-1094] p0098 N78-13064
Flow measurements behind a rotor operating in a boundary layer
[AD-A046359] p0148 N78-15012
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345
Rotor design implications for composite material properties
[UCRL-80117] p0553 N78-30182
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
Dynamic analysis of flexible rotor-bearing systems using a model approach
p0616 N78-32424
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433

ROUGHNESS
NT SURFACE ROUGHNESS
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016

ROUTES
Stochastic properties of conflict frequency at multiple connected air route intersections
p0590 A [illegible]-51945

RPV
U REMOTELY PILOTED VEHICLES

RUBBER
NT ELASTOMERS
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043
Preliminary investigation into the application of magnetic rubber inspection (M.R.I.)
[NLR-TR-76083-U] p0445 N78-26507

RUDDERS
NT AERIAL RUDDERS

RULES
NT FLIGHT RULES
NT INSTRUMENT FLIGHT RULES
NT VISUAL FLIGHT RULES

RUN TIME (COMPUTERS)
Solution of multitarget, multisensor tracking

problems on the Illiac IV parallel processor
p0113 A78-18063
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
RUNWAY ALIGNMENT
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways, appendixes
[NASA-CR-145281] p0200 N78-16066
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet --- low visibility regimes
[AD-A052870] p0452 N78-27103
RUNWAY CONDITIONS
The influence of runway irregularities on the dynamic behavior of aircraft at takeoff
[ONERA, TP NO. 1977-147] p0003 A78-12034
The FAA Slant Visibility Range measurement system
p0056 A78-14996
Vertical fog classifications and slant/runway visual range ratios
p0056 A78-14997
A method of calculating ILS approach surfaces
p0275 A78-29207
Runway roughness characterization by DDS approach --- Dynamic Data System
p0284 A78-30679
Aircraft takeoff from dirt airstrips
p0293 A78-32273
Sounding the runway
p0582 A78-50822
Methodology for determining, isolating, and correcting runway roughness --- using aircraft dynamic response
[AD-A044328/3] p0099 N78-13078
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet --- low visibility regimes
[AD-A052870] p0452 N78-27103
RUNWAY LIGHTS
Development of a frangible approach light
[AD-A043859] p0043 N78-11122
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
RUNWAYS
A study on the capacity of runway systems
p0188 A78-24374
Launching the Harrier from a ski jump
p0234 A78-28463
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
Analysis of pavements designed by CBR equation --- California Bearing Ratio for airfield pavements
p0426 A78-42856
Quick bearing strength tests for concrete pavements
p0469 A78-44224
Collection of commercial aircraft characteristics for study of runway roughness
[AD-A042623/9] p0030 N78-10118
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
Porous friction surface runway at USNAS Dallas, Texas
[AD-A042181] p0043 N78-11124
Effects of landing approach methods and separation intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
Analysis of permanent deformations of flexible airport pavements
[AD-A044269/9] p0099 N78-13079
Test report on the application of the Linde fog removal equipment at the Erding air base --- Germany
[DLR-IB-75/8] p0145 N78-14763
Airport surface traffic control TAGS planning alternatives and cost/benefit analysis
[AD-A037790] p0196 N78-16038
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170
Nondestructive pavement evaluation
[AD-A052707] p0400 N78-24159
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
Freeze-thaw tests of liquid deicing chemicals on selected pavement materials
[AD-A051771] p0493 N78-28279
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111
Nansen-Drift Station Project: Remote sea-ice runway construction
[AD-A054720] p0503 N78-29113
Engineering and development program plan: Wake vortex
[AD-A051143] p0546 N78-30071
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
Chevron cutting: Experiment with new runway mixtures
[NASA-TM-75448] p0616 N78-32427
Parameters of future ATC systems relating to airport capacity/delay
[AD-A057059] p0624 N78-33068
RURAL AREAS
Airport choice in low demand region
p0229 A78-27547
RYAN AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT

S

S BAND
U SUPERHIGH FREQUENCIES
U ULTRAHIGH FREQUENCIES
S-N DIAGRAMS
Reliability of fatigue-stressed structures based on experimental results. II
p0130 A78-20147
Basic fatigue curves of aircraft structures
p0283 A78-30356
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
S-3 AIRCRAFT
S-3A composite spoiler in-service evaluation
p0219 A78-25209
Program analyses for the S-3 weapon system improvement program
[AD-A055887] p0561 N78-31093
SAAB AIRCRAFT
NT SAAB 37 AIRCRAFT
SAAB 37 AIRCRAFT
Experience in using high-modulus carbon fibre --- in Viggen wing panels
p0077 A78-16896
SAFETY
NT AIRCRAFT SAFETY
NT FLIGHT SAFETY
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
SAFETY DEVICES
NT ARRESTING GEAR
NT EJECTION SEATS
NT ESCAPE CAPSULES
NT HELMETS

Protective equipment for cargo transport in passenger cabins
p0051 A78-13501
Survival after a crash
p0072 A78-16280
Some test results concerning visibility of obstacle and hazard beacons
p0280 A78-29907
General aviation crash survivability
[SAE PAPER 780017] p0331 A78-33360
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
SAFETY FACTORS
Factors of safety: Historical development, state of the art and future outlook
[AGARD-R-661] p0153 N78-15311
SAFETY MANAGEMENT
How to make an airport unattractive to birds
p0275 A78-29209
Airport fires and their causes
p0339 A78-35274
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
SAILPLANES
U GLIDERS
SAINT VENANT FLEXURE PROBLEM
U SAINT VENANT PRINCIPLE
SAINT VENANT PRINCIPLE
Real-gas version of the gasdynamic formulas of Saint-Venant and Wantzel
p0570 A78-50304
SALT SPRAY TESTS
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197
SAMPLED DATA
U DATA SAMPLING
SAMPLED DATA SYSTEMS
U DATA SAMPLING
SAMPLING
NT AIR SAMPLING
NT DATA SAMPLING
NT PARTICULATE SAMPLING
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
SAN FRANCISCO (CA)
Benefit-cost evaluation of an intra-regional air service in the Bay area
[NASA-CR-152084] p0256 N78-19082
SANDWICH CONSTRUCTION
U SANDWICH STRUCTURES
SANDWICH STRUCTURES
Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
Diffusion brazing titanium sandwich structures
p0587 A78-51524
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087
Impact tests on fibrous composite sandwich structures
[NASA-TM-78719] p0631 N78-33152
SATAN (SENSOR)
U TERRAIN ANALYSIS
SATELLITE ANTENNAS
Special problems in the determination of the radiation characteristics of antennas on aircraft and satellites with the aid of geometric diffraction theory
p0288 A78-31582
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case --- satellite and aircraft antennas
p0248 N78-18290
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
p0248 N78-18291
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case --- satellite and aircraft antennas
[ESA-TT-435] p0365 N78-23310
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
[ESA-TT-436] p0365 N78-23311
SATELLITE ATTITUDE DISTURBANCE
U ATTITUDE STABILITY
SATELLITE COMMUNICATIONS
U SPACECRAFT COMMUNICATION
SATELLITE NAVIGATION SYSTEMS
Positioning and navigation by satellite --- for marine operations
[AIAA 77-1553] p0051 A78-13684
A Navstar/GPS simulator
p0062 A78-15592
Satellite-aided ATC system concepts employing the Navstar Global Positioning System
[M77-59] p0111 A78-17903
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
Results of the NASA/MARAD L-band satellite navigation experiment
p0375 A78-37525
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
SATELLITE ORBITS
Differential altimetry for satellite orbit determination
p0289 A78-31915
Evaluation of geometric performance of global positioning system
p0378 A78-37987
SATELLITE POWER TRANSMISSION (TO EARTH)
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
SATELLITE SOLAR ENERGY CONVERSION
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
SATELLITE SOLAR POWER STATIONS
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
SATELLITE TRANSMISSION
A comparative evaluation of modem techniques for simultaneous data and range measurement --- aircraft position location and data communication via satellite
[AIAA 77-1474] p0005 A78-12231
Satellite images to aircraft in flight --- GEOS image transmission feasibility analysis
p0056 A78-14982
High performance antenna assembly --- for aircraft communication with satellite
p0062 A78-15588
Space optical communications with the Nd:YAG laser
p0285 A78-30886
SATELLITE-BORNE INSTRUMENTS
Differential altimetry for satellite orbit determination
p0289 A78-31915
Satellites for position determination
p0601 A78-53911
SATELLITE-BORNE PHOTOGRAPHY
Satellite images to aircraft in flight --- GEOS image transmission feasibility analysis
p0056 A78-14982
SATELLITES
NT AEROSAT SATELLITES
NT ATS 5
NT ATS 6
NT COMMUNICATION SATELLITES
NT EOSS
NT GEODETIC SATELLITES
NT GEOS SATELLITES (ESA)
NT MARITIME SATELLITES
NT MAROTS (ESA)
NT METEOROLOGICAL SATELLITES

NT NAVIGATION SATELLITES
NT NAVSTAR SATELLITES
NT TRANSIT SATELLITES
SCALE EFFECT
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
Unsteady loads due to propulsive lift configurations. Part D: The development of an experimental facility for the investigation of scaling effects on propulsive lift configurations
[NASA-CR-156123] p0300 N78-20070
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
SCALE MODELS
Model study of dynamic response of landing mat
p0117 A78-18755
Preliminary comparison of model and prototype wakes --- building wake effects on atmospheric boundary layer
[AIAA PAPER 78-254] p0162 A78-20774
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28
[NASA-TM-73250] p0079 N78-12011
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Effect of design changes on aerodynamic and acoustic performance of translating-centerbody sonic inlets
[NASA-TP-1132] p0236 N78-17998
Genesis N + 1: The origins of the turbo-jet revolution
p0252 N78-19047
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
Pilot model air cushion vehicle (LACV-30) program
[AD-A053686] p0492 N78-28275
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage --- conducted in the Langley V/STOL wind tunnel
[NASA-TM-74033] p0604 N78-32049
SCALING LAWS
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057
Investigations of scaling laws for jet impingement
p0393 N78-24074
SCANNERS
NT MULTISPECTRAL BAND SCANNERS
NT OPTICAL SCANNERS
TRSB microwave landing system demonstration program at Nairobi, Kenya
[AD-A054646] p0489 N78-28074
TRSB microwave landing system demonstration program at Kristiansand, Norway
[AD-A055317] p0559 N78-31071
TRSB microwave landing system demonstration program at Charleroi, Belgium
[AD-A055920] p0559 N78-31072
SCANNING
NT FREQUENCY SCANNING
NT RADAR SCANNING
SCANNING DEVICES
U SCANNERS
SCAR PROGRAM
U SUPERSONIC CRUISE AIRCRAFT RESEARCH
SCARS (GEOLOGY)
U EROSION
SCAT
U SUPERSONIC COMMERCIAL AIR TRANSPORT
SCATTERING
NT ACOUSTIC SCATTERING
NT BACKSCATTERING
NT ELECTROMAGNETIC SCATTERING
NT NEUTRON SCATTERING
SCHEDULING
NT PREDICTION ANALYSIS TECHNIQUES
Aircraft maintenance scheduling
p0052 A78-13849
Optimum schedule for replacement of aircraft system parts under incomplete information on their reliability
p0164 A78-20879
Factors influencing schedule reliability in international operations
p0275 A78-29213
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance improvement summary --- management methods
[AD-A045400] p0092 N78-13002
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
SCHLIEREN PHOTOGRAPHY
Flowfield and pressure field of a model propeller
p0191 A78-24451
SCIENCE
Engineering and Scientific Data Management
[NASA-CP-2055] p0635 N78-33776
SCIENTIFIC SATELLITES
NT ATS 5
NT ATS 6
SCRAMJET ENGINES
U SUPERSONIC COMBUSTION RAMJET ENGINES
SCRAMJETS
U SUPERSONIC COMBUSTION RAMJET ENGINES
SCREEN EFFECT
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
SCREENS
A major refurbishing program for the NAE 5-ft. x 5-ft. blowdown wind tunnel
p0415 A78-40725
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
SE-3160 HELICOPTER
The AS 350 light helicopter
p0263 N78-19140
SEA ICE
Nansen-Drift Station Project: Remote sea-ice runway construction
[AD-A054720] p0503 N78-29113

SEA KING HELICOPTER
U SH-3 HELICOPTER
SEA LAUNCHING
Aircraft operating environments around high speed ships --- RPV feasibility for hydrofoil ships
[AIAA PAPER 78-1184] p0422 A78-41877
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
The STO deck launch problem
p0259 N78-19107
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
SEA STATES
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
SEALANTS
U SEALERS
SEALERS
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
Fundamentals of noncuring sealants for aircraft fuel tanks
[AD-A054627] p0553 N78-30247
SEALING
Gas path sealing in turbine engines
p0330 A78-33218
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
SEALS (STOPPERS)
NT O RING SEALS
Calculation of a double-thread groove seal
p0132 A78-20290
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
Transient expansion of the components of an air seal on a gas turbine disc
[SAE PAPER 770974] p0179 A78-23818
Self-acting shaft seals
p0331 A78-33219
Circumferential seals for use as oil seals
[ASLE PREPRINT 78-AM-3D-2] p0378 A78-38095
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
The development of a regenerator seal for vehicular use --- for automatic gas turbine engines
p0574 A78-50587
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
Design considerations in mechanical face seals for improved performance. 1: Basic configurations
[NASA-TM-73735] p0101 N78-13439
Feasibility study of negative lift circumferential type seal for helicopter transmissions
[NASA-CR-135302] p0212 N78-17390
Gas path sealing in turbine engines
[NASA-TM-73890] p0318 N78-21109
Evaluation of a lip-seal hydraulic fitting for the F-14 aircraft
[AD-A051159] p0396 N78-24120
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands --- gas turbine engines
[NASA-CR-135307] p0459 N78-27427
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity --- rotor precession in steam turbines
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
Technical evaluation report on the 51st(B) PEP Specialists' Meeting of the Propulsion and Energetics Panel on Seal Technology in Gas Turbine engines
[AGARD-AR-123] p0612 N78-32104
SEAPLANES
Tri-Gull amphibian development
p0233 A78-28460
Ride characteristics of catamaran sea loiter aircraft in a seaway
[AD-A045363] p0096 N78-13048
SEARCH RADAR
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
SEARCHING
Special study: Emergency locator transmitters, an overview
[NTSB-AAS-78-1] p0314 N78-21063
SEAS
Flying over the exclusive economic zone --- aircraft overflight regulations
p0281 A78-29945
SEASONS
NT WINTER
SEATS
NT EJECTION SEATS
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Study to develop improved fire resistant aircraft passenger seat materials, phase 1
[NASA-CR-152056] p0036 N78-11042
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
SECONDARY BATTERIES
U STORAGE BATTERIES
SECONDARY FLOW
Secondary flows in turbomachines
[AGARD-CP-214] p0041 N78-11083
Understanding turbine secondary flow
p0041 N78-11097
Effect of endwall cooling on secondary flows in turbine stator vanes
p0041 N78-11098
Technical evaluation report on the 49th(A) Propulsion and Energetics Panel Specialists' Meeting on Secondary Flows in turbomachines
[AGARD-AR-109] p0142 N78-14052
Flow measurements behind a rotor operating in a boundary layer
[AD-A046359] p0148 N78-15012
SECONDARY RADAR
The technology for the automatic tracking of targets of surveillance and secondary radar
p0073 A78-16377
SECULAR PERTURBATION
U LONG TERM EFFECTS
SECURITY
NT AIRPORT SECURITY
The legal basis for security measures in air traffic
p0589 A78-51823
SEEKERS
U HOMING DEVICES
SELECTIVE DISSEMINATION OF INFORMATION
The problem of technology transfer: Real or imagined
[AD-A042961] p0213 N78-17943
Carbon fiber study
[NASA-TM-79449] p0401 N78-24292
SELF ADAPTIVE CONTROL SYSTEMS
An adaptive learning control system for aircraft
[NASA-CR-156930] p0413 N78-25966
SELF EXCITATION
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand
p0333 A78-34161
SELF FOCUSING
Self-focusing of a Gaussian beam in a supersonic gas flow

p0585 A78-51387
SELF INDUCED VIBRATION
NT PANEL FLUTTER
NT SUPERSONIC FLUTTER
NT TRANSONIC FLUTTER
The PIO problem - Theory and implications to flight test --- Pilot-Induced Oscillation
p0125 A78-19442
SELF OSCILLATION
Theory of bending-torsional self-oscillations of an aircraft wing system
p0292 A78-32264
Model calculations of the generation of self-excited oscillations in a supersonic duct with stepwise widening of cross section
p0584 A78-51165
A theory for longitudinal short-period pilot induced oscillations
[AD-A056982] p0630 N78-33120
SELF REGULATING
U AUTOMATIC CONTROL
SELSYNS (TRADEMARK)
U SERVOMOTORS
SEMICONDUCTOR DEVICES
NT CMOS
NT LIGHT EMITTING DIODES
Component damage analysis
p0036 N78-11040
Performance evaluation of thin layer thermoelectric device
[AD-A045361] p0103 N78-13918
SEMICONDUCTOR DIODES
NT LIGHT EMITTING DIODES
SEMICONDUCTORS (MATERIALS)
NT CMOS
SEMISPAN MODELS
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8474] p0299 N78-20065
SENEGAL
TRSB microwave landing system demonstration program at Dakar, Senegal
[AD-A054645] p0489 N78-28073
SENSES
U SENSORY PERCEPTION
SENSIBILITY
U SENSITIVITY
SENSITIVITY
NT IMPACT RESISTANCE
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041
SENSORS
Sensor failure detection using analytical redundancy
p0182 A78-23862
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
SENSORY PERCEPTION
NT PROPRIOCEPTION
NT SPACE PERCEPTION
NT VISUAL PERCEPTION
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
SEPARATED FLOW
NT BOUNDARY LAYER SEPARATION
Stratford's turbulent separation criterion for axially-symmetric flows
p0002 A78-11635
The computation of self-similar three-dimensional separated flows
p0127 A78-19657
Asymptotic theory of the onset of separation at a flap on a cooled body situated in hypersonic flow under conditions of weak hypersonic interaction
p0128 A78-19671
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Wings with controlled separation
[DGLR PAPER 77-028] p0189 A78-24419
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
Some important physical phenomena in flows with separated turbulent boundary layers
p0336 A78-34839
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
Flow past nonconical wings with separation
p0377 A78-37775
Possibilities of phase separation in supersonic two-phase flows
p0426 A78-42630
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
Numerical study of flow in axisymmetric Laval nozzles, taking account of overexpansion with flow separation
p0429 A78-43114
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
Investigation of flow in centrifugal impeller with tandum inducer
p0577 A78-50614
Noise from separated flow of flat plate
p0577 A78-50622
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057
An investigation of corner separation within a thrust augmenter having Coanda jets
[AD-A052131] p0366 N78-23392

Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and comparison with other data
[NASA-TM-72855] p0405 N78-25055
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Airframe response to separated flow
p0438 N78-26116
A theroretical investigation of the aerodynamics of low aspect-ratio wings with partial leading-edge separation
p0449 N78-27075
Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
Phenomenological aspects of quasi-stationary controlled and uncontrolled three-dimensional flow separations --- in relation to aircraft design considerations and swept wings
p0493 N78-28402
Prediction of the severity of buffeting --- structural response to the aerodynamic excitation produced by separated flow
p0493 N78-28404
Some unsteady separation problems for slender bodies
p0493 N78-28405
Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
Prediction of unsteady separated flows on oscillating airfoils
p0494 N78-28409
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Inverse boundary-layer theory and comparison with experiment
[NASA-TP-1208] p0615 N78-32385
SEPARATORS
NT AIR FILTERS
NT FLUID FILTERS
Advanced scavenge systems for an integrated engine inlet particle separator
[AD-A047872] p0210 N78-17069
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
Equipment to neutralize aircraft fuel spills
[AD-A053862] p0460 N78-27628
SEQUENTIAL ANALYSIS
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
SERIES (MATHEMATICS)
NT ASYMPTOTIC SERIES
SERVICE LIFE
Investigation of turbine blade endurance during thermal cycling and vibration in a gas stream
p0001 A78-10267
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
Life cycle testing for avionics development
p0060 A78-15557
Problems of rating the life of aircraft design elements in random loading
p0133 A78-20402
Economic and safety aspects of prolonging engine life
p0217 A78-25142
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0282 A78-30259
Estimating the service life of rolling contact bearings when synthetic oils are used --- in aircraft gas turbine engines
p0334 A78-34324
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
Expendable design concept --- applied to gas generator for jet fuel starter
[AIAA PAPER 78-964] p0463 A78-43523
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
Aircraft engine fuel pump cavitation endurance test
[SAE ARP 492B] p0471 A78-44685
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900
Avionics maintenance study
[AD-A042568] p0017 N78-10003
Design of rotors for improved structural life
p0027 N78-10085
Materials and manufacturing processes for increased life/reliability --- of turbine wheels
p0027 N78-10086
Economic problems of determining the durability of aircraft engines
[AD-A044672] p0088 N78-12096
Project optimisation of military gas turbines with respect to turbine life
p0319 N78-21120
Application to life prediction of design data derived from fatigue tests with service-like load sequences
[RAE-LIB-TRANS-1939] p0356 N78-22388
Critical inspection of bearings for life extension
p0444 N78-26472
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094
SERVICES
NT METEOROLOGICAL SERVICES
SERVOCONTROL
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523
New aspects in the movement simulation of the research flight simulator of DFVLR
[DGLR PAPER 77-086] p0290 A78-31950
SERVOMECHANISMS
NT SERVOMOTORS
F-16's ISAs reduce cost, weight, and leakage --- hydraulic integrated servoactuators for flight control
p0108 A78-17737
Research and development of aircraft control actuation systems. The development of a direct drive fly-by-wire flight control system and evaluation of a force sharing fly-by-wire actuator
[AD-A047283] p0200 N78-16065
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
Hydraulic constant recoil program
[AD-A049313] p0267 N78-19517
SERVOMOTORS
Electric flight control systems - Applicable now
p0067 A78-15688
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
Use of a stepping motor for measuring fuel quantity in a digital system for control of rotational speed
p0277 A78-29586
Properties of hydraulic servomotor controlled by flapper valve or by edge valve --- turbojet engine system
p0277 A78-29587
SERVOS
U SERVOMOTORS
SERVOSTABILITY CONTROL
U SERVOCONTROL
SES
U SURFACE EFFECT SHIPS
SH-3 HELICOPTER
Stability of a helicopter carrying an underslung load
p0524 A78-49398
SHADOWGRAPH PHOTOGRAPHY
NT SCHLIEREN PHOTOGRAPHY
SHAFTS (MACHINE ELEMENTS)
NT TURBOSHAFTS

Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints
p0077 A78-16907
Self-acting shaft seals
p0331 A78-33219
DSTR/501-M62B dynamic interface critical speed problem
[AD-A042441] p0042 N78-11108
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] p0408 N78-25090
SHALE OIL
Jet fuels from synthetic crudes
p0461 A78-43415
SHANKS
U JOINTS (JUNCTIONS)
SHANNON INFORMATION THEORY
U INFORMATION THEORY
SHAPES
NT CONVEXITY
NT OGEE SHAPE
SHARP LEADING EDGES
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
Supersonic flow over sharp-edged wings
p0480 A78-46091
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
SHATTERING
U FRAGMENTATION
SHEAR FATIGUE
U SHEAR STRESS
SHEAR FLOW
Three-dimensional transonic shear flow in a channel
p0010 A78-12290
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
An investigation into the effects of shear on the flow past bluff bodies
[AIAA PAPER 78-331] p0186 A78-24025
The force on a small sphere in slow viscous flow
p0591 A78-52175
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
SHEAR LAYERS
The time response of an aspirating probe in gas sampling
p0001 A78-10600
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
SHEAR STRESS
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
Shear buckling of corrugated plates with quasi-sinusoidal corrugations
p0616 N78-32458
SHEARING STRESS
U SHEAR STRESS
SHEET METAL
U METAL SHEETS
SHELL STABILITY
On the design of aerospace shell structures
p0075 A78-16600
Natural frequencies of a soft heavy cylindrical shell under the effect of internal pressure
p0580 A78-50717
SHELL THEORY
Three-dimensional boundary layer theory using shell geometrical concepts
p0584 A78-51176
SHELLS (STRUCTURAL FORMS)
NT CONICAL SHELLS
NT CYLINDRICAL SHELLS
NT ELASTIC SHELLS
NT METAL SHELLS
NT RADOMES
NT REINFORCED SHELLS
NT SPHERICAL SHELLS
NT THIN WALLED SHELLS
SHELTERS
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278
SHIELDING
NT ELECTROMAGNETIC SHIELDING
NT HEAT SHIELDING
NT REENTRY SHIELDING
Development of fiber shields for engine containment --- mathematical models
p0026 N78-10079
Lightweight engine containment --- Kevlar shielding
p0026 N78-10080
SHIP TERMINALS
Access study and simulation of the Marots communication system
p0226 A78-27027
SHIPS
NT AIRCRAFT CARRIERS
NT NUCLEAR POWERED SHIPS
NT SUBMARINES
NT SURFACE EFFECT SHIPS
NT SWATH (SHIP)
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Naval structural materials - Requirements, issues, and opportunities
p0583 A78-51149
Review of US Navy VSTOL handling qualities requirements
p0258 N78-19104
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
SHOCK ABSORBERS
Optimum design of a landing gear shock absorber system
p0224 A78-26480
Comparison of linear and nonlinear dampers for landing gears
p0590 A78-51947
SHOCK DIFFUSERS
U DIFFUSERS
SHOCK LAYERS
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
SHOCK LOADS
NT BLAST LOADS
Determination of pressure impulses at supersonic delta wings with incident weak shock waves
p0129 A78-19729
SHOCK RESISTANCE
NT IMPACT RESISTANCE
SHOCK TUBES
NT SHOCK TUNNELS
Flow starting times in constant-area supersonic diffusers
p0076 A78-16810

The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-X-74945] p0089 N78-12105
A study of test section configuration for shock tube testing of transonic airfoils
[NASA-CR-157237] p0442 N78-26153

SHOCK TUNNELS
Driver gas contamination in a high-enthalpy reflected shock tunnel
p0223 A78-26235
Pulse tubes for aerodynamic studies --- Russian book
p0415 A78-40298

SHOCK WAVE CONTROL
Obtaining exact solutions for shock-free flow past a symmetrical airfoil profile with a local supersonic zone
p0127 A78-19668
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611

SHOCK WAVE GENERATORS
NT SHOCK TUBES
NT SHOCK TUNNELS

SHOCK WAVE INTERACTION
Interaction of a shock wave with an entropy layer
p0164 A78-20886
The supersonic flow past cusped wings
p0230 A78-28056
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle
p0379 A78-38641
Supersonic flow over sharp-edged wings
p0480 A78-46091
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185

SHOCK WAVE LUMINESCENCE
Calculation of viscous radiant gas flows --- hypersonic reentry
p0599 A78-53556

SHOCK WAVE PROFILES
Hypersonic gas flow past a flat delta wing
p0166 A78-20966
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393

SHOCK WAVE PROPAGATION
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
Two new correlation dependencies for parameters of flow on a plane delta wing
p0166 A78-20933
Entropy layer in two-dimensional flows --- hypersonic ideal gas flow behind shock wave
p0168 A78-21132
Hypersonic flow past a conical wing with detached shock wave at the leading edges
p0169 A78-22078
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation --- German book
p0175 A78-22937
A least square finite element technique for transonic flow with shock
[AIAA PAPER 78-328] p0186 A78-24022
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
Calculation of the aerodynamic characteristics of a wing moving with subsonic velocity under a slight effect of a shock wave
p0334 A78-34442
Notes on the transonic indicial method --- for two dimensional airfoil flutter derivative calculation
p0376 A78-37732
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
Flow development on a supercritical wing
p0477 A78-45234
Some comments on sonic boom focusing
p0584 A78-51172

SHOCK WAVES
NT MACH CONES
NT NORMAL SHOCK WAVES
NT OBLIQUE SHOCK WAVES
NT SONIC BOOMS
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
Normal force of a flat triangular wing in a supersonic flow
p0278 A78-29720
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041

SHORT CIRCUITS
Current and scattering field of a long short-circuited receiving vibrator --- aircraft antenna compatibility
p0339 A78-35467

SHORT HAUL AIRCRAFT
NT A-300 AIRCRAFT
NT EUROPEAN AIRBUS
Preliminary QCSEE program - Test results --- Quiet Clean Short-haul Experimental Engine
[SAE PAPER 771008] p0181 A78-23840
The division of air transport markets between carriers - Local service operations
p0284 A78-30697
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
The short-haul jet designed with ATC in mind
p0587 A78-51516
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
Proceedings of the Workshop on Engine-Airframe Integration Short-Haul Aircraft
[AD-A053417] p0499 N78-29088
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070

SHORT TAKEOFF AIRCRAFT
NT A-300 AIRCRAFT
NT C-15 AIRCRAFT
NT EUROPEAN AIRBUS
The Dash 7 - An aircraft for today's environment
p0004 A78-12213
Some opportunities in the development of light aircraft
p0112 A78-18036

Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- applied to STOL autopilot design
p0114 A78-18464
The interaction between the characteristics of the operational environment and the flight performance of second-generation STOL aircraft - Some preliminary results
p0121 A78-19073
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
YC-15 STOL performance flight test methods
p0125 A78-19445
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
EBF noise suppression and aerodynamic penalties --- Externally Blown Flaps
[AIAA PAPER 78-240] p0162 A78-20763
Airports for short takeoff and landing
p0178 A78-23471
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- application to Augmentor Wing Jet STOL Research Aircraft flare control autopilot design
p0184 A78-23917
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
YC-15 development and test highlights - Phase III
p0233 A78-28457
Influence of structural components of a by-pass engine on its flight characteristics --- STOL aircraft
p0277 A78-29582
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
New trends and problem areas in automatic flight control
p0282 A78-30252
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
STOL system fuel savings - Ground and air
p0287 A78-31312
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
Aerodynamics of slender lifting surface in accelerated flight
p0416 A78-40836
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Takeoff performance of STOL aircraft
p0527 A78-49744
The attachment of a ventilated plane jet to an inclined plane wall
p0600 A78-53764
The investigation of take-off and landing characteristics of jet shortened take-off and landing aircraft (STOL)
[AD-A044292] p0023 N78-10055
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
Specifications for IDAMST software --- for short takeoff aircraft avionics
[AD-A047163] p0198 N78-16049
Evaluation of STOL navigation avionics
[NASA-CR-155566] p0208 N78-17051
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
The NAE airborne V/STOL simulator
p0263 N78-19145
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
A review and application of the equivalent deterministic variable technique: The estimation of a STOL aircraft's response to turbulence
[UTIAS-221] p0353 N78-22112
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138
Study to determine operational and performance criteria for STOL aircraft operating in low visibility conditions
[NASA-CR-152164] p0490 N78-28083
Wind-tunnel testing of VTOL and STOL aircraft
[NASA-TM-78750] p0543 N78-30040

SHORT WAVE RADIATION
NT CENTIMETER WAVES
NT MILLIMETER WAVES
NT SUBMILLIMETER WAVES

SHROUDED BODIES
U SHROUDS

SHROUDED NOZZLES
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TN-D-8449] p0081 N78-12037

SHROUDED TURBINES
An analytic study of the energy dissipation of turbomachinery bladed-disk assemblies due to inter-shroud segment rubbing
[ASME PAPER 77-DET-73] p0338 A78-35231
Operational experience with long-safe-life gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146

SHROUDS
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613

SHUNTS
U BYPASSES

SHUTTLE BOOSTERS
U SPACE SHUTTLE BOOSTERS

SHUTTLE ORBITERS
U SPACE SHUTTLE ORBITERS

SI
U INTERNATIONAL SYSTEM OF UNITS

SIC (COEFFICIENT)
U STRUCTURAL INFLUENCE COEFFICIENTS

SIDE-LOOKING RADAR
NT RADAR IMAGERY
Moving target analysis utilizing side-looking airborne radar
p0105 A78-17196
A modular side looking airborne radar to fulfill a multitude of surveillance missions
p0587 A78-51543

SIDESLIP
Flight investigation and theory of direct side-force control

[AIAA 78-1287] p0541 A78-50194
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025

SIGHT
U VISUAL PERCEPTION

SIGNAL ANALYSIS
Analog versus digital null-steering controllers
p0227 A78-27039
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040
An adaptive interference cancellation system for elimination of co-located interference signals --- for ATC sites
p0227 A78-27041

SIGNAL DETECTION
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116

SIGNAL DETECTORS
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068

SIGNAL DISCRIMINATORS
U SIGNAL DETECTORS

SIGNAL ENCODING
A modulation/encoding scheme for use in a fading environment
p0069 A78-15718
Some results on digital chirp --- radar design
p0222 A78-26160

SIGNAL FADEOUT
U SIGNAL FADING

SIGNAL FADING
A modulation/encoding scheme for use in a fading environment
p0069 A78-15718
Multipath fading simulation model and full-scale results --- polarized electromagnetic signal transmission
p0221 A78-25879
Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439

SIGNAL GENERATORS
NT FREQUENCY SYNTHESIZERS
NT FUNCTION GENERATORS

SIGNAL MEASUREMENT
On the possibility of classifying radar targets with a coherently measured echo signal --- German book
p0293 A78-32308

SIGNAL PROCESSING
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer --- Joint Tactical Information Distribution System for TDMA digital communication and navigation
[AIAA 77-1415] p0014 A78-12677
Automatic low frequency gain limiting for A-C coupled signal processing systems --- thermal imaging
p0054 A78-14938
Adaptive phased arrays for tactical communication systems --- for ECM rejection
p0227 A78-27040
Evaluation of airborne radar Doppler processors
p0374 A78-37477
Filtering techniques in avionic transmitters
p0384 A78-39084
Two-channel method of processing interval codes --- for navigation systems
p0429 A78-43085
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
A high duty factor chirp radar
p0538 A78-49976
Suboptimal adaptive filtering of radio signals
p0601 A78-53903
The extension of GPMS architecture for the distribution of audio signals within Navy aircraft
[AD-A044739] p0090 N78-12299
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070

SIGNAL RECEPTION
NT SYMBOLS
NT TELEVISION RECEPTION

SIGNAL STABILIZATION
MSP/ITWL airborne measuring system
p0231 A78-28196

SIGNAL TO NOISE RATIOS
Two-channel method of processing interval codes --- for navigation systems
p0429 A78-43085
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314

SIGNAL TRANSMISSION
NT DATA TRANSMISSION
NT IONOSPHERIC PROPAGATION
NT MICROWAVE ATTENUATION
NT MICROWAVE TRANSMISSION
NT MULTIPATH TRANSMISSION
NT RADAR TRANSMISSION
NT RADIO TELEMETRY
NT RADIO TRANSMISSION
NT SATELLITE TRANSMISSION
NT TELEMETRY
NT TELEVISION TRANSMISSION
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349

SIGNATURE ANALYSIS
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft
[AIAA PAPER 78-242] p0162 A78-20765
On the possibility of classifying radar targets with a coherently measured echo signal --- German book
p0293 A78-32308
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393

SIGNATURES
NT RADAR SIGNATURES
NT SPECTRAL SIGNATURES

SIGNS (SYMBOLS)
U SYMBOLS

SIKORSKY AIRCRAFT
NT H-53 HELICOPTER
NT SH-3 HELICOPTER
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
The US Army UTTAS and AAH programs
p0262 N78-19131
The Sikorsky S-76 program
p0263 N78-19139

SIKORSKY HSS-2 HELICOPTER
U SH-3 HELICOPTER

SIKORSKY S-65 HELICOPTER
U H-53 HELICOPTER

SILICATES
NT YTTRIUM-IRON GARNET

SILICON CARBIDES
New materials in the Si-C-Al-O-N and related systems --- for gas turbine and high temperature applications
p0601 A78-53864
High-temperature ceramics for automobile gas turbines

[NASA-TM-75457] p0614 N78-32264
SILICON COMPOUNDS
NT SILICON CARBIDES
NT SILICON NITRIDES
NT YTTRIUM-IRON GARNET
SILICON NITRIDES
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
High-temperature ceramics for automobile gas turbines
[NASA-TM-75457] p0614 N78-32264
SILICON POLYMERS
NT SILICONES
SILICON SOLAR CELLS
U SOLAR CELLS
SILICONES
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs
[AD-A046824] p0153 N78-15287
SIMICOR (IMAGE CORRELATOR)
U IMAGE CORRELATORS
SIMILARITY THEOREM
Similarity considerations for nonequilibrium nozzle flows
p0583 A78-51163
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
SIMPLE HARMONIC MOTION
Two-dimensional aerofoils and control surfaces in simple harmonic motion in incompressible inviscid flow
[ARC-CP-1392] p0545 N78-30068
SIMULATION
NT ANALOG SIMULATION
NT ATMOSPHERIC ENTRY SIMULATION
NT COMPUTERIZED SIMULATION
NT CONTROL SIMULATION
NT DIGITAL SIMULATION
NT ENVIRONMENT SIMULATION
NT EXHAUST FLOW SIMULATION
NT FLIGHT SIMULATION
NT LANDING SIMULATION
NT RHEOELECTRICAL SIMULATION
NT SPACE ENVIRONMENT SIMULATION
NT THERMAL SIMULATION
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
Aircraft cargo compartment fire test simulation program
[NASA-CR-151951] p0324 N78-21223
SIMULATOR TRAINING
U TRAINING SIMULATORS
SIMULATORS
NT COCKPIT SIMULATORS
NT CONTROL SIMULATION
NT ENVIRONMENT SIMULATORS
NT FLIGHT SIMULATORS
NT LANGLEY COMPLEX COORDINATOR
NT MOTION SIMULATORS
NT TARGET SIMULATORS
NT TRAINING SIMULATORS
NT VIBRATION SIMULATORS
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
SIMULTANEOUS IMAGE CORRELATOR
U IMAGE CORRELATORS
SINGLE STAGE TO ORBIT VEHICLES
Ramjet propulsion for single-stage-to-orbit vehicles
[SAE PAPER 771011] p0182 A78-23843
Static aerodynamic characteristics of a winged single-stage-to-orbit vehicle at Mach numbers from 0.3 to 4.63
[NASA-TP-1233] p0544 N78-30053
SINGULAR INTEGRAL EQUATIONS
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
SINGULARITY (MATHEMATICS)
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
Calculation of cascade flow by means of spline fit singularity
p0576 A78-50606
A mean camberline singularity method for two-dimensional steady and oscillatory aerofoils and control surfaces in inviscid incompressible flow
[ARC-CP-1391] p0545 N78-30066
SINKS
NT HEAT SINKS
SITES
NT LANDING SITES
Study on problems of terminal site location -- environmental effects on airport, harbor or truck depot
p0369 A78-36323
Uncertainties in airport cost analysis and their effect on site selection
p0089 N78-12104
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
SIZE (DIMENSIONS)
Aircraft size and air transport costs
p0395 N78-24112
Advanced structural sizing methodology
p0448 N78-27064
SIZE DETERMINATION
The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008
SKIN (STRUCTURAL MEMBER)
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
An advanced composite wing for the F-16
p0077 A78-16920
Application of skin technology to turbine blades --- zero gravity manufacture
[AIAA PAPER 78-285] p0163 A78-20792
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft
[NASA-CR-144863] p0310 N78-20534
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
SKIN FRICTION
NT AERODYNAMIC DRAG
NT FRICTION DRAG
NT SUPERSONIC DRAG
NT VISCOUS DRAG
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064
SKIRTS
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029
SKYHAWK AIRCRAFT
U A-4 AIRCRAFT
SKYHOOK BALLOONS
Small ballooning serves the Navy
p0004 A78-12174
SLABS
Interaction of a surface wave with a dielectric

slab discontinuity
[AD-A055956] p0615 N78-32327
SLANT PERCEPTION
U SPACE PERCEPTION
SLEEVES
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
SLENDER BODIES
NT SLENDER CONES
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
Drag formula for elongated aircraft noses
p0278 A78-29718
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
The flow about a slender propeller-driven body in a temperature stratified fluid
p0154 N78-15432
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
Some unsteady separation problems for slender bodies
p0249 N78-18383
An experimental investigation of steady asymmetric vortex shedding from a slender body of revolution at high angles of attack
[AD-A048370] p0253 N78-19062
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
Slender body theory programmed for bodies with arbitrary cross section --- including fuselages
[NASA-CR-145383] p0437 N78-26102
Some unsteady separation problems for slender bodies
p0493 N78-28405
SLENDER CONES
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443
SLENDER WINGS
NT INFINITE SPAN WINGS
A method for determining the induced resistance of wings with high aspect ratio in a subsonic regime
p0120 A78-19065
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
Influence of slip on the aerodynamic behavior of a wing at hypersonic speeds
p0342 A78-35916
Aerodynamics of slender lifting surface in accelerated flight
p0416 A78-40836
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
SLIDING FRICTION
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
An analytic study of the energy dissipation of turbomachinery bladed-disk assemblies due to inter-shroud segment rubbing
[ASME PAPER 77-DET-73] p0338 A78-35231
SLIP FLOW
Influence of slip on the aerodynamic behavior of a wing at hypersonic speeds
p0342 A78-35916
SLIPSTREAMS
NT PROPELLER SLIPSTREAMS
SLOPES
NT GLIDE PATHS
SLOTS
NT WING SLOTS
SLOTTED WIND TUNNELS
Slotted test section dynamics of the NTF
[NASA-CR-155266] p0089 N78-12106
Design and performance evaluation of slotted walls for two-dimensional wind tunnels
[NASA-TM-78648] p0247 N78-18085
SLURRY PROPELLANTS
Suspension fuels. One type of hopeful high energy fuel
[AD-A045908] p0153 N78-15294
SMALL PERTURBATION FLOW
A note on adaptive-wall wind tunnels
p0002 A78-11634
Small perturbation expansions in unsteady aerofoil theory
p0074 A78-16401
Displacement thickness distributions in transonic flows about 3-D wings
p0108 A78-17612
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Stability of subsonic gasdynamic flows
p0274 A78-28959
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
Second order transonic small perturbation flow
p0424 A78-42198
SMALL WATER PLANE AREA TWIN HULL
U SWATH (SHIP)
SMOKE
Subisokinetic sampling errors for aircraft turbine engine smoke probes
p0379 A78-38575
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
Fire detector response in aircraft applications
p0599 A78-53674
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
SMOKE ABATEMENT
Evaluation of an automated smoke abatement system for jet engine test cells
[AD-A044587] p0089 N78-12107
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
SMOOTHING
A new mathematical method for the aerodynamic smoothing of profiles
p0118 A78-19039
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
SNOW
Rolling resistance of aircraft wheels in dry snow
[VTI-128] p0140 N78-14041
SNOWPLOW EFFECT
U PLASMA DYNAMICS
SOCIAL FACTORS
More public consultation on airport plans
p0275 A78-29208
Synthesis of social surveys on noise annoyance
p0517 A78-48051
Aviation futures to the year 2000
p0595 A78-52966
Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
SOCIOLOGY
NT SOCIAL FACTORS
SOFTWARE (COMPUTERS)
U COMPUTER PROGRAMS
U COMPUTER SYSTEMS PROGRAMS
SOIL MECHANICS
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068

SOILS
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
SOLAR ARRAYS
185 W/kg solar array for naval sea control systems
p0002 A78-10964
SOLAR AZIMUTH
U AZIMUTH
SOLAR CELLS
A solar airship - More than a flight of fancy --- solar cell powered transport aircraft
p0469 A78-44226
SOLAR CONVERTERS
U SOLAR GENERATORS
SOLAR GENERATORS
NT SOLAR CELLS
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
SOLAR POWER GENERATION
U SOLAR GENERATORS
SOLAR POWER SOURCES
U SOLAR GENERATORS
SOLAR PROPULSION
A solar airship - More than a flight of fancy --- solar cell powered transport aircraft
p0469 A78-44226
SOLAR RADIATION
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
SOLID PHASES
Motion of the solid phase of an aerosol at large Reynolds numbers
p0334 A78-34421
SOLID PROPELLANT ROCKET ENGINES
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
SOLID PROPELLANTS
NT SOLID ROCKET PROPELLANTS
Boron combustion in combinatory propulsion
[ESA-TT-462] p0365 N78-23258
SOLID ROCKET PROPELLANTS
Modeling solid-fuel ramjet combustion
p0076 A78-16709
SOLID ROTATION
U ROTATING BODIES
SOLID SOLUTIONS
New materials in the Si-C-Al-O-N and related systems --- for gas turbine and high temperature applications
p0601 A78-53864
SOLID STATE DEVICES
NT CMOS
NT SEMICONDUCTOR DEVICES
NT YAG LASERS
Solid-state displays for fuel management systems --- for aircraft
p0510 A78-47900
SOLID STATE LASERS
NT YAG LASERS
SOLID SURFACES
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands --- gas turbine engines
[NASA-CR-135307] p0459 N78-27427
SOLID-SOLID INTERFACES
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102
SOLUTIONS
NT GAS MIXTURES
NT SOLID SOLUTIONS
SOLVENTS
Water borne coatings
p0069 A78-15852
Halogenated solvent-induced corrosion in hydraulic systems --- hydraulic drives for aircraft radar antennas
[ASLE PREPRINT 78-AM-4A-2] p0378 A78-38083
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
SONIC BOOMS
Some characteristics of sonic boom propagation in an inhomogeneous atmosphere
p0128 A78-19691
The location of the ground focus line produced by a supersonic aircraft
p0178 A78-23457
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393
Long-distance focusing of Concorde sonic boom
p0517 A78-48052
Some comments on sonic boom focusing
p0584 A78-51172
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
Practical aspects of sonic boom problems
[ICAS-PAPER-70-23] p0018 N78-10011
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
Simplified sonic-boom prediction --- using aerodynamic configuration charts and calculators or slide rules
[NASA-TP-1122] p0301 N78-20078
Pressure inside a room subjected to sonic boom
[UTIAS-TN-207] p0345 N78-22029
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NTIS/PS-78/0239] p0410 N78-25099
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
SONIC FLOW
U TRANSONIC FLOW
SONIC SPEED
U ACOUSTIC VELOCITY
SOOT
Soot formation in a turbulent swirling flow
p0040 N78-11075
SORTIE CAN
U SPACELAB
SORTIE LAB
U SPACELAB
SOUND
U ACOUSTICS
SOUND ABSORPTION
U SOUND TRANSMISSION
SOUND BARRIER
U ACOUSTIC VELOCITY
SOUND DETECTORS
U SOUND TRANSDUCERS
SOUND FIELDS
Noise of aerodynamic and, in particular, turbojet origin
[ONERA, TP NO. 1977-161] p0075 A78-16618
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909
SOUND GENERATORS
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
SOUND INTENSITY
Calculations of maximum A-weighted sound levels dBA --- single aircraft noise levels in airport vicinities
p0460 N78-27872
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
SOUND LOCALIZATION
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
Resolution enhanced sound detecting apparatus --- wind tunnel apparatus for airframe noise localization
[NASA-CASE-NPO-14134-1] p0271 N78-19898
SOUND MEASUREMENT
U ACOUSTIC MEASUREMENTS

SOUND PRESSURE
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
Type measurements of aircraft interior sound pressure levels in cruise
[SAE ARP 1323] p0471 A78-44689
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
SOUND PROPAGATION
Noise of aerodynamic and, in particular, turbojet origin
[ONERA, TP NO. 1977-161] p0075 A78-16618
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
Acoustical effects of blade tip shape changes on a full scale helicopter rotor in a wind tunnel
[NASA-CR-152082] p0311 N78-20918
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
SOUND TRANSDUCERS
NT MICROPHONES
Sound separation probes for flowing duct noise measurements --- jet engine diagnostics
p0106 A78-17396
Resolution enhanced sound detecting apparatus --- wind tunnel apparatus for airframe noise localization
[NASA-CASE-NPO-14134-1] p0271 N78-19898
SOUND TRANSMISSION
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
On sound transmission into a heavily-damped cylinder --- aircraft noise in fuselage
p0285 A78-31019
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements --- computer program
[AD-A051700] p0403 N78-24899
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840
SOUND VELOCITY
U ACOUSTIC VELOCITY
SOUND WAVES
NT AERODYNAMIC NOISE
NT AIRCRAFT NOISE
NT ENGINE NOISE
NT JET AIRCRAFT NOISE
NT NOISE (SOUND)
NT SONIC BOOMS
The noise from the large-scale structure of a jet
p0227 A78-27144
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
Effects of acoustic and vortical disturbances on the turbulent boundary layer at free-stream Mach number 0.5
[AD-A047921] p0205 N78-17026
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
Aircraft noise propagation --- sound diffraction by wings
p0445 N78-26879
SOUNDERS
U SOUNDING
SOUNDING
Sounding the runway
p0582 A78-50822
SOUNDING ROCKETS
Estimated temperature corrections for the Menaka-II meteorological rocket payload
p0479 A78-45341
SOURCE PROGRAMS
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
SOVEREIGNTY
Flying over the exclusive economic zone --- aircraft overflight regulations
p0281 A78-29945
SOVIET UNION
U U.S.S.R.
SOYUZ SPACECRAFT
From space on a parachute
[NASA-TM-75577] p0631 N78-33140
SPACE CAPSULES
NT ESCAPE CAPSULES
SPACE COMMUNICATION
NT SPACECRAFT COMMUNICATION
Space optical communications with the Nd:YAG laser
p0285 A78-30886
SPACE ENVIRONMENT
U AEROSPACE ENVIRONMENTS
SPACE ENVIRONMENT SIMULATION
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
Assess II - A simulated mission of Spacelab
p0569 A78-50276
SPACE FLIGHT
NT HYPERSONIC REENTRY
NT MANNED SPACE FLIGHT
SPACE FLIGHT STRESS
Safety of space flights
p0516 A78-47952
SPACE GLIDERS
U LIFTING REENTRY VEHICLES
SPACE MAINTENANCE
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
SPACE MANUFACTURING
Application of skin technology to turbine blades --- zero gravity manufacture
[AIAA PAPER 78-285] p0163 A78-20792
SPACE MECHANICS
NT ASTRODYNAMICS
NT ORBITAL MECHANICS
SPACE MISSIONS
Assess II - A simulated mission of Spacelab
p0569 A78-50276
SPACE PERCEPTION
Optical simulator with a holographic component --- infinity display system
[AIAA 78-1581] p0579 A78-50671
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet --- low visibility regimes
[AD-A052870] p0452 N78-27103
SPACE PROCESSING
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
SPACE PROGRAMS
NT U.S.S.R. SPACE PROGRAM
SPACE SHUTTLE BOOSTERS
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134
SPACE SHUTTLE ORBITERS
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
Flutter tests of the mated 747 Shuttle Carrier Aircraft-Orbiter
[SAE PAPER 770971] p0179 A78-23816
Shuttle carrier aircraft flight tests
p0234 A78-28464
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
Space shuttle separation mechanisms
[NASA-TM-58210] p0613 N78-32177

SPACE SHUTTLE PAYLOADS
NT SPACELAB
SPACE SHUTTLES
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
1977 report to the aerospace profession; Proceedings of the Twenty-first Symposium, Beverly Hills, Calif., October 12-15, 1977
p0232 A78-28451
Flying qualities of an aircraft with strong lateral-directional coupling --- application to space shuttle stability control
[AIAA 78-1361] p0484 A78-46550
Neutralization problem for a Space Shuttle
p0507 A78-47124
SPACE SIMULATORS
NT LANGLEY COMPLEX COORDINATOR
SPACE SURVEILLANCE (SPACEBORNE)
A single site passive collision avoidance system
p0111 A78-17912
SPACE SYSTEMS ENGINEERING
U AEROSPACE ENGINEERING
SPACE TRANSPORTATION
Spacelab hardware update
[AAS PAPER 78-005] p0599 A78-53614
SPACE TRANSPORTATION SYSTEM
NT SPACE SHUTTLE BOOSTERS
NT SPACE SHUTTLE ORBITERS
NT SPACE SHUTTLES
SPACE VEHICLE CONTROL
U SPACECRAFT CONTROL
SPACEBORNE PHOTOGRAPHY
NT SATELLITE-BORNE PHOTOGRAPHY
SPACECRAFT ANTENNAS
Antenna fairings for flight vehicles /2nd revised and enlarged edition/ --- Russian book
p0598 A78-53426
SPACECRAFT CHARGING
Neutralization problem for a Space Shuttle
p0507 A78-47124
SPACECRAFT COMMUNICATION
Experimental analysis and selection of airborne antennas for aircraft-to-satellite communication systems
p0122 A78-19140
Aircraft Satellite Data Link
p0338 A78-34971
Dual band airborne SATCOM terminal
p0537 A78-49972
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
Satellite communications mode simulation tests for oceanic air traffic control
[AD-A052546] p0458 N78-27313
SPACECRAFT CONFIGURATIONS
An algorithm for complex study of the aerodynamic characteristics of spacecraft
p0599 A78-53506
SPACECRAFT CONSTRUCTION MATERIALS
Role of titanium in aerospace applications
p0123 A78-19402
Metals in flight /2nd enlarged and revised edition/ --- aircraft and spacecraft construction materials
p0415 A78-40375
SPACECRAFT CONTROL
Spacecraft flight control systems --- Russian book
p0599 A78-53434
SPACECRAFT DESIGN
NT IPAD
The design process --- computer aided design for complex aerospace systems
[AIAA PAPER 78-1483] p0514 A78-47928
The use of the AIAA-Bendix Design Competition in aerospace design courses
[AIAA PAPER 78-1488] p0514 A78-47931
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
Spacelab hardware update
[AAS PAPER 78-005] p0599 A78-53614
SPACECRAFT LANDING
From space on a parachute
[NASA-TM-75577] p0631 N78-33140
SPACECRAFT ORBITAL ASSEMBLY
U ORBITAL ASSEMBLY
SPACECRAFT ORBITS
NT SATELLITE ORBITS
SPACECRAFT PROPULSION
NT PHOTONIC PROPULSION
NT SOLAR PROPULSION
Ramjet propulsion for single-stage-to-orbit vehicles
[SAE PAPER 771011] p0182 A78-23843
SPACECRAFT STRUCTURES
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
Boron aluminum composite materials
[AAAF-NT-77-38] p0355 N78-22170
SPACELAB
New structuralization and work of current interest in the research area of fluid mechanics --- propulsion systems, aerodynamics and acoustics
p0337 A78-34941
Assess II - A simulated mission of Spacelab
p0569 A78-50276
Spacelab hardware update
[AAS PAPER 78-005] p0599 A78-53614
Spacelab: Testing of Metalbond 328 WC and foam adhesive BSL 208/5
[FOK-R-2162] p0442 N78-26221
SPACELAB PAYLOADS
NT POINTING CONTROL SYSTEMS
SPACELAB SIMULATION FLIGHTS
U ASSESS PROGRAM
SPACING
NT AIRCRAFT APPROACH SPACING
SPANLOADER AIRCRAFT
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
SPANWISE BLOWING
NT BLOWING
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
Wings with controlled separation
[DGLR PAPER 77-028] p0189 A78-24419
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
SPARE PARTS
Improving readiness: A cost-effective approach
[AD-A050765] p0345 N78-22021
SPARK IGNITION
Ignition of liquid fuel sprays at subatmospheric pressures
p0470 A78-44268
Lightweight, low compression aircraft diesel engine --- converting a spark ignition engine to the diesel cycle
[NASA-CR-135300] p0325 N78-21471
SPARROW MISSILES
NT SPARROW 3 MISSILE
SPARROW 3 MISSILE
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041
SPATIAL ORIENTATION
U ATTITUDE (INCLINATION)
SPECIFIC HEAT
Effect of temperature-dependent heat capacity on aerodynamic ablation of melting bodies
p0571 A78-50455
SPECIFIC IMPULSE
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926
SPECIFICATIONS
NT AIRCRAFT SPECIFICATIONS
NT EQUIPMENT SPECIFICATIONS
Impact of broad-specification fuels on future jet aircraft --- engine components and performance

p0448 N78-27059
SPECTRA
NT EMISSION SPECTRA
NT INFRARED SPECTRA
NT NOISE SPECTRA
NT POWER SPECTRA
NT VIBRATIONAL SPECTRA
SPECTRAL ANALYSIS
U SPECTRUM ANALYSIS
SPECTRAL ENERGY DISTRIBUTION
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
SPECTRAL SIGNATURES
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
Infrared receiver performance --- airborne warning system by detection of target spectral signature
p0538 A78-49985
SPECTROMETERS
NT INFRARED SPECTROMETERS
SPECTRORADIOMETERS
A spectroradiometer for airborne remote sensing --- for geological, vegetation and hydrological mapping
p0298 A78-32396
SPECTROSCOPIC ANALYSIS
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054
SPECTROSCOPY
NT ABSORPTION SPECTROSCOPY
NT SPECTROSCOPIC ANALYSIS
SPECTRUM ANALYSIS
Acoustic investigation of upper surface blown flaps
p0092 N78-13005
Digital spectral analysis and filtering of experimental aerodynamic data
[SAND-77-0225] p0093 N78-13022
Metrology of aircraft overflight noise. Errors due to its nonstationary character
p0358 N78-23038
SPEECH DISCRIMINATION
U SPEECH RECOGNITION
SPEECH RECOGNITION
Display and speech devices for simulator instructor/operator station applications
[AD-A049247] p0266 N78-19169
SPEED
U VELOCITY
SPEED CONTROL
Airspeed control under wind shear conditions
p0071 A78-16185
Transient speed response of a gas turbine
p0122 A78-19229
Constant speed generating systems --- for aircraft electric power supply
[SAE PAPER 771001] p0181 A78-23835
Control of aircraft turbine engine acceleration
p0277 A78-29583
Use of a stepping motor for measuring fuel quantity in a digital system for control of rotational speed
p0277 A78-29586
SPEED INDICATORS
NT ANEMOMETERS
NT HOT-FILM ANEMOMETERS
NT HOT-WIRE ANEMOMETERS
NT LASER ANEMOMETERS
Minimum safe performance over speed warning instruments --- for subsonic aircraft
[SAE AS 8007] p0471 A78-44683
SPEED REGULATION
U SPEED CONTROL
SPEEDOMETERS
U SPEED INDICATORS
SPHERES
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
Irrotational flow around a spherical segment --- aerodynamic brakes application
p0588 A78-51688
The force on a small sphere in slow viscous flow
p0591 A78-52175
SPHERICAL SHELLS
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
SPHEROIDS
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
SPIKE ANTENNAS
U MONOPOLE ANTENNAS
SPIKES (AERODYNAMIC CONFIGURATIONS)
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
SPILLING
Equipment to neutralize aircraft fuel spills
[AD-A053862] p0460 N78-27628
SPIN DYNAMICS
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
Going for a spin - Fighter style
p0288 A78-31745
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data
[AIAA 78-1373] p0485 A78-46561
Investigation of a side force due to ablation --- reentry vehicle spin dynamic stability tests
p0571 A78-50457
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
SPIN REDUCTION
F-5E/F spin avoidance testing
p0380 A78-38747
SPIN STABILIZATION
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
Magnus effects on ballistic trajectories
[AD-A048966] p0254 N78-19071
SPIN TESTS
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
SPLASHING
A note on multicyclic control by swashplate oscillation
[NASA-TM-78475] p0323 N78-21159
SPLINE FUNCTIONS
The closed spline functions --- applied to interpolation problems for airfoils
p0415 A78-40493
Hermite closed splines
p0527 A78-49713
Calculation of cascade flow by means of spline fit singularity
p0576 A78-50606
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
SPLINES
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings

[AD-A053834] p0455 N78-27133
SPOILERS
S-3A composite spoiler in-service evaluation p0219 A78-25209
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-145207] p0022 N78-10047
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-144984] p0044 N78-11199
The development and use of spoilers as vortex attenuators p0081 N78-12027
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control --- in the Langley Unitary Plan Wind Tunnel
[NASA-TP-1124] p0301 N78-20079
SPRAY NOZZLES
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces p0049 A78-13184
SPRAYED COATINGS
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284
SPRAYED PROTECTIVE COATINGS
U PROTECTIVE COATINGS
U SPRAYED COATINGS
SPRAYERS
Acoustic properties of pneumatic swirl injectors p0049 A78-13161
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
SPRAYING
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
SPRAYING APPARATUS
U SPRAYERS
SPRAYS
U SPRAYERS
SPREAD SPECTRUM TRANSMISSION
Active reference null steering for spread spectrum signals p0226 A78-27038
SQUID PROJECT
Project SQUID
[AD-A047076] p0199 N78-16056
ST VENANT FLEXURE PROBLEM
U SAINT VENANT PRINCIPLE
STABILITY
NT AERODYNAMIC STABILITY
NT AIRCRAFT STABILITY
NT ATTITUDE STABILITY
NT BOUNDARY LAYER STABILITY
NT COMBUSTION STABILITY
NT CONTROL STABILITY
NT DIRECTIONAL STABILITY
NT DYNAMIC STABILITY
NT FLAME STABILITY
NT FLOW STABILITY
NT FREQUENCY STABILITY
NT HOVERING STABILITY
NT LATERAL STABILITY
NT LONGITUDINAL STABILITY
NT LOW SPEED STABILITY
NT MAGNETOHYDRODYNAMIC STABILITY
NT MOTION STABILITY
NT ROTARY STABILITY
NT SHELL STABILITY
NT STATIC STABILITY
NT STRUCTURAL STABILITY
NT SYSTEMS STABILITY
NT THERMAL STABILITY
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
STABILITY AUGMENTATION
Optimum tail plane design for artificially stabilized aircraft p0276 A78-29334
Fly-by-wire flight control p0280 A78-29935
Stability augmentation by eigenvalues control and model matching p0507 A78-46965
Evolution of a cost-effective, task-oriented, lateral-directional SAS for the A-10 aircraft --- Stability Augmentation System
[AIAA PAPER 78-1460] p0512 A78-47910
STABILITY DERIVATIVES
NT PITCHING MOMENTS
NT ROLLING MOMENTS
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels p0224 A78-26487
Method for calculating the longitudinal, lateral, and cross aerodynamic derivatives of a flight vehicle at subsonic speeds p0342 A78-35905
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
Lateral-aerodynamic characteristics of highly-dihedraled wings p0523 A78-49334
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
An introduction to the aerodynamics of flight dynamics
[RAE-TM-AERO-1710] p0152 N78-15057
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121
STABILITY TESTS
NT FLIGHT STABILITY TESTS
NT WIND TUNNEL STABILITY TESTS
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
Aerodynamic stability testing with magnetically suspended models p0612 N78-32108
STABILIZATION
NT SIGNAL STABILIZATION
NT SPIN STABILIZATION
NT THREE AXIS STABILIZATION
STABILIZED PLATFORMS
Influence of constrained arrestors on the operation of gyroscopic stabilizers p0585 A78-51355
Tethered RPV-rotorcraft p0263 N78-19141
STABILIZERS (FLUID DYNAMICS)
NT HORIZONTAL TAIL SURFACES
Low-cost composite primary structure --- for B-1 aircraft vertical stabilizer p0069 A78-15855
Design problems associated with the B-1 Composite Horizontal Stabilizer p0109 A78-17890

Comment on 'Effect of stabilizer dihedral and static lift on T-tail flutter'
p0416 A78-40800
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface --- YF-12A ventral fins
p0605 N78-32058

STAGE SEPARATION
Graphics for the hybrid stores separation simulation of the B77 system
[SAND-78-8212] p0562 N78-31099
Space shuttle separation mechanisms
[NASA-TM-58210] p0613 N78-32177

STAGING (ROCKETS)
U STAGE SEPARATION

STAGNATION POINT
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503
Asymmetric supercritical flow past a double wedge with embedded shocks
p0603 N78-32042

STAGNATION PRESSURE
Pressure dependence of turbulent jet noise
p0470 A78-44357

STAGNATION REGION
U STAGNATION POINT

STAINLESS STEELS
Medium and high resistance steels
[AAAF-NT-77-36] p0355 N78-22223

STANDARDIZATION
NT COMMONALITY (EQUIPMENT)
Air Force electronically generated symbology standardization
p0067 A78-15670
Microwave landing systems --- time reference scanning beam used to determine aircraft approach
p0275 A78-29221
Modular packaging approaches
[AD-A048205] p0249 N78-18321
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112

STANDARDS
NT FREQUENCY STANDARDS
Acoustical standards and their application to aircraft noise
p0341 A78-35661
Minimum performance standard for anticollision light systems
[SAE AS 8017] p0471 A78-44684
Preferred electrical connectors for aerospace vehicles and associated equipment
[SAE ARP 1308A] p0471 A78-44688
MIL-STD-1553B proposed --- data bus development in avionic architecture
p0531 A78-49866
Environmental protection agency aircraft emissions standards
p0038 N78-11064
Current standards of fatigue test on strike aircraft
[AGARD-AR-92] p0242 N78-18051
Practice and principle in environmental noise rating
[NPL-AC-81] p0367 N78-23885
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673

STANDING WAVE RATIOS
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368

STANDS
U SUPPORTS

STARLIFTER AIRCRAFT
U C-141 AIRCRAFT

STARTERS
NT ENGINE STARTERS

STARTING
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-FRC-10113-1] p0265 N78-19166
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024

STATE ESTIMATION
U ORBITAL POSITION ESTIMATION

STATIC AERODYNAMIC CHARACTERISTICS
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
Static aerodynamic characteristics of a winged single-stage-to-orbit vehicle at Mach numbers from 0.3 to 4.63
[NASA-TP-1233] p0544 N78-30053

STATIC ELECTRICITY
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568

STATIC FIRING
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report --- outdoor static and 40 x 80 ft. wind tunnel tests
[NASA-CR-152076] p0271 N78-19899

STATIC LOADS
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
Influences of sway braces and mounting gaps on the static aerodynamic loading of external stores
[AD-A054963] p0607 N78-32068

STATIC PRESSURE
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
Static pressure orifice system testing and apparatus
[NASA-CASE-LAR-12269-1] p0630 N78-33123

STATIC STABILITY
NT SHELL STABILITY
NT STRUCTURAL STABILITY
Static and dynamic stability --- aircraft longitudinal control
p0332 A78-33588
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
Static stability of vehicles which use the lifting force of airfoils
[AD-A049069] p0255 N78-19074
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051

STATIC TESTS
NT STATIC FIRING
Computer-aided statistical analysis of the stress-strain state of load-carrying structures p0131 A78-20267
The error function of analytical structural design --- in aircraft component failure in static tests p0291 A78-32123
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100
STATIC THRUST
Research on the statically thrusting propeller
[NASA-CR-157214] p0409 N78-25092
STATIONS.
NT AUTOMATIC WEATHER STATIONS
NT EOSS
NT GLOBAL TRACKING NETWORK
NT GROUND STATIONS
STATISTICAL ANALYSIS
NT FACTOR ANALYSIS
NT RAYLEIGH DISTRIBUTION
NT REGRESSION ANALYSIS
NT REGRESSION COEFFICIENTS
NT SEQUENTIAL ANALYSIS
NT WEIBULL DENSITY FUNCTIONS
Analytic construction of part-throttle GTE characteristics p0049 A78-13170
Statistical modeling of optimal GTE parameter trimming p0049 A78-13173
Computer-aided statistical analysis of the stress-strain state of load-carrying structures p0131 A78-20267
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime p0187 A78-24275
A study on the capacity of runway systems p0188 A78-24374
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment p0276 A78-29327
Geometric restitution of single coverage aircraft multispectral scanner data p0280 A78-29854
The error function of analytical structural design --- in aircraft component failure in static tests p0291 A78-32123
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades p0338 A78-35129
A review of human factors investigation studies in aircraft accidents during the period 1957-1977 in Aeromedical Laboratory, JASDF p0587 A78-51497
New organization of air traffic over the North Atlantic region p0588 A78-51599
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 30 June 1977
[AD-A047857] p0207 N78-17045
A statistical test of the calculated mean fatigue life using service experience --- applied to P-27 drag stay bracket
[FOK-S-144] p0440 N78-26138
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 31 December 1977
[AD-A055672] p0562 N78-31098
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105
STATISTICAL COMMUNICATION THEORY
U COMMUNICATION THEORY
STATISTICAL DISTRIBUTIONS
NT RAYLEIGH DISTRIBUTION
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles --- of ground-to-aircraft wideband data links p0592 A78-52360
Design of a collision avoidance system model with statistical interrogation --- separation and collision avoidance by nonsynchronous techniques (SECANT) p0304 N78-20107
STATISTICAL MECHANICS
Thirty years of fluid dynamics p0585 A78-51280
STATISTICAL PROBABILITY
U PROBABILITY THEORY
STATOR BLADES
Unsteady dynamic responses of subsonic cascades to sinusoidal gust: III - Stator and rotor blade cascades in oscillation p0577 A78-50617
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
Use of leaning vanes in a two stage fan
[NASA-CR-152134] p0319 N78-21115
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data p0322 N78-21148
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
Stator rotor tools
[NASA-CASE-MSC-16000-1] p0402 N78-24544
STATORS
Some formulation considerations in 3D transonic flow computation p0010 A78-12291
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime p0119 A78-19050
Rotor-stator interaction noise with hindsight --- turbomachine acoustics p0329 A78-33093
Boundary layer development on axial-flow turbomachinery blading p0468 A78-43863
Effect of endwall cooling on secondary flows in turbine stator vanes p0041 N78-11098
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
STEADY FLOW
Three-dimensional transonic shear flow in a channel p0010 A78-12290
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages p0010 A78-12292
Flow starting times in constant-area supersonic diffusers p0076 A78-16810
Integral equation formulation for transonic lifting profiles p0076 A78-16820

Numerical study of transonic profiles
p0120 A78-19061
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
Design of long blades by method of constant circulation
p0122 A78-19230
Steady and unsteady transonic flow [AIAA PAPER 78-160] p0160 A78-20713
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils [AIAA PAPER 78-11] p0171 A78-22553
Successive-approximation calculation of a steady subsonic gas flow about an airfoil lattice
p0186 A78-24085
Some singular aspects of three-dimensional transonic flow
p0223 A78-26234
Operational experience in the Langley expansion tube with various test gases [NASA-TM-X-74945] p0089 N78-12105
Contributions to steady and unsteady aerodynamics [DLR-FB-77-34] p0204 N78-17004

STEADY STATE
An experimental study of the steady-state response of oil-film dampers [ASME PAPER 77-DET-33] p0135 A78-20598

STEADY STATE FLOW
U EQUILIBRIUM FLOW

STEAM TURBINES
Design of long blades by method of constant circulation
p0122 A78-19230
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity --- rotor precession in steam turbines [BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066

STEEL STRUCTURES
Fracture analysis of aerospace metals
p0175 A78-22724

STEELS
NT HIGH STRENGTH STEELS
NT MARAGING STEELS
NT STAINLESS STEELS
C-141A service experience - Materials and processes
p0219 A78-25207
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
Identification of material for AN, MS, and AS engine and propeller standard utility parts and also for company parts [SAE AS 269G] p0471 A78-44680
TRIP steels promise high reliability hardware [AD-A052765] p0401 N78-24348
Metal technology for future aircraft design
p0550 N78-30115

STEEP GRADIENT AIRCRAFT
U V/STOL AIRCRAFT

STEEPEST ASCENT METHOD
U STEEPEST DESCENT METHOD

STEEPEST DESCENT METHOD
Steep gradient approach systems research for all-weather operations
p0432 N78-26062

STEERABLE ANTENNAS
Null steering antennas in the tactical scenario
p0226 A78-27037
Active reference null steering for spread spectrum signals
p0226 A78-27038

STELLAR DOPPLER SHIFT
U DOPPLER EFFECT

STEP FUNCTIONS
The effect of two-dimensionality of the flow of a gas with stepwise distribution of total parameters on the integral characteristics of a Laval nozzle
p0429 A78-43116

STERNS
U AFTERBODIES

STIFF STRUCTURES
U RIGID STRUCTURES

STIFFENING
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769
Integrally stiffened laminate construction
p0370 A78-36431
Stress intensity factors, for collinear cracks in a stiffened sheet --- aircraft structures
p0378 A78-38122

STIFFNESS
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484

STIFFNESS MATRIX
Taking structural and technological constraints into account in the design of maximum-stiffness load-bearing structures
p0164 A78-20880

STIMULATED EMISSION DEVICES
NT CARBON DIOXIDE LASERS
NT DYE LASERS
NT LASERS
NT NEODYMIUM LASERS
NT RING LASERS
NT YAG LASERS

STOCHASTIC PROCESSES
NT MARKOV CHAINS
NT RANDOM PROCESSES
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Optimum schedule for replacement of aircraft system parts under incomplete information on their reliability
p0164 A78-20879
Optimum structural design of sheet-stringer panels subjected to jet noise excitation
p0230 A78-27887
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
Mutual counteraction of two moving objects. I --- remote optimal encounter guidance
p0338 A78-34960
Stochastic properties of conflict frequency at multiple connected air route intersections
p0590 A78-51945

STOCKPILING
On the benefit-to-cost ratio of base-level stocking decisions for low demand items [AD-A053953] p0460 N78-27979

STOL AIRCRAFT
U SHORT TAKEOFF AIRCRAFT

STORABLE PROPELLANTS
NT AIRCRAFT FUELS

STORAGE BATTERIES
NT NICKEL CADMIUM BATTERIES
Nickel/cadmium aircraft batteries: Battery alarm unit [AD-A039521] p0310 N78-20631

STORM DAMAGE
Protection for aircraft --- from lightning
p0072 A78-16274

STORMS
NT STORMS (METEOROLOGY)
NT THUNDERSTORMS

STORMS (METEOROLOGY)
NT THUNDERSTORMS
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave
p0188 A78-24356

STRAIGHT WINGS
U RECTANGULAR WINGS

STRAIN DISTRIBUTION
U STRESS CONCENTRATION

STRAIN ENERGY METHODS
Taking structural and technological constraints into account in the design of maximum-stiffness load-bearing structures
p0164 A78-20880

STRAIN FATIGUE
U FATIGUE (MATERIALS)
STRAIN GAGES
Strain gage calibration of a complex wing
p0071 A78-16182
A computer-based system for processing dynamic data --- from aircraft gas turbine engine strain measurements
p0372 A78-37108
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
STRAIN HARDENING
The damage sum in fatigue of structure components
p0226 A78-26834
STRAIN RATE
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
STRAIN SOFTENING
U PLASTIC DEFORMATION
STRAKES
U NOSE FINS
STRAPDOWN INERTIAL GUIDANCE
A multifunctional guidance and control system --- for CCV F-104G aircraft
p0064 A78-15640
System description and performance characteristics of a quad redundant strapdown inertial navigation and flight control system
p0065 A78-15641
Flight-control/navigation inertial reference system
p0065 A78-15642
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed sensors --- German book
p0228 A78-27383
Benefits of strapdown over gimbal INS systems for aircraft application
p0282 A78-30253
Advances in inertial navigation
p0509 A78-47481
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
In-flight alignment/calibration techniques for unaided tactical guidance --- of air-launched missiles
p0534 A78-49929
Multi-Function Inertial Reference Assembly /MIRA/ update --- digital aircraft systems
p0535 A78-49941
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
New techniques for low cost strapdown inertial systems
p0315 N78-21073
Laser-gyro strapdown inertial system applications
p0439 N78-26130
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
Strapdown system redundancy management flight demonstration --- vertical takeoff and landing aircraft
[NASA-CR-145356] p0608 N78-32079
STRATEGY
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
STRATIFIED FLOW
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687
The flow about a slender propeller-driven body in a temperature stratified fluid
p0154 N78-15432
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
STRATOFORTRESS AIRCRAFT
U B-52 AIRCRAFT
STRATOSPHERE
Scientific ballooning in India --- for stratospheric cosmic ray measurements
p0113 A78-18182
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816
Stratospheric cruise emission reduction program
p0040 N78-11077
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
STRATOTANKER AIRCRAFT
U C-135 AIRCRAFT
STREAM FUNCTIONS (FLUIDS)
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Supercritical wing sections III --- Book
p0341 A78-35728
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245
Irrotational flow around a spherical segment --- aerodynamic brakes application
p0588 A78-51688
STREAMLINE FLOW
U LAMINAR FLOW
STREAMLINED BODIES
NT FAIRINGS
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
STREAMLINING
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Cross-flow characteristics on a cylindrical body at incidence in subsonic flow
p0373 A78-37406

Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141
An investigation of drag reduction for tractor trailer vehicles
[NASA-CR-144877] p0633 N78-33444
STREAMS
NT GAS STREAMS
STRENGTH OF MATERIALS
U MECHANICAL PROPERTIES
STRESS ANALYSIS
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
Modification of aerojet cumulative damage criterion to utilize nonlinear stress allowable
p0100 N78-13223
Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations --- crack propagation in fighter aircraft
[AD-A042785] p0206 N78-17044
An analysis of the rotor blade stresses of the three stage compressor of the Ames Research Center 11- by 11-foot transonic wind tunnel
[NASA-CR-152083] p0209 N78-17061
Calculation methods for fatigue life and crack propagation
p0241 N78-18049
Linearized Newtonian aerodynamics of slender inflated cones
[AD-A048695] p0254 N78-19064
A general study of hybrid composite laminates --- airframe materials
[AD-A048364] p0266 N78-19208
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
Determination of bending stresses in a spur gear tooth
[RAE-LIB-TRANS-1923] p0504 N78-29452
Recent developments in analysis of crack propagation and fracture of practical materials --- stress analysis in aircraft structures
[NASA-TM-78766] p0556 N78-30606
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
Stress analysis of ceramic turbine blades by finite element method, part 1
[AD-A056310] p0629 N78-33111
STRESS CALCULATIONS
U STRESS ANALYSIS
STRESS CONCENTRATION
Transmission of a concentrated force to a plate
p0129 A78-19726
Computer-aided statistical analysis of the stress-strain state of load-carrying structures
p0131 A78-20267
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917
Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
Stress intensity factors, for collinear cracks in a stiffened sheet --- aircraft structures
p0378 A78-38122
Fatigue crack growth of titanium fan blades
p0589 A78-51744
Stress intensity factors for a cracked hole in a row of holes --- using compounding technique
[RAE-TR-77073] p0154 N78-15525
STRESS CORROSION
NT STRESS CORROSION CRACKING
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
Study to identify stress corrosion prone parts on the TA-7C aircraft
[AD-A045489] p0100 N78-13186
STRESS CORROSION CRACKING
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
A method of predicting stress corrosion cracking
p0468 A78-44105
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095
STRESS CYCLES
The strength of structures and the applications of the fracture mechanics
p0178 A78-23574
Load sequences for laboratory simulation of flight-by-flight stress spectra --- of aircraft structural fatigue
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
STRESS DISTRIBUTION
U STRESS CONCENTRATION
STRESS MEASUREMENT
Report on aircraft fatigue studies --- in-flight monitoring and stress measurements
[AD-A049876] p0317 N78-21102
Application of X-ray diffraction stress measuring techniques --- to aircraft structures
p0443 N78-26467
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction --- fatigue life of aircraft construction materials
[BMVG-FBWT-77-23] p0555 N78-30603
STRESS RELAXATION
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
STRESS RUPTURE STRENGTH
U CREEP RUPTURE STRENGTH
STRESS-STRAIN DISTRIBUTION
U STRESS CONCENTRATION
STRESS-STRAIN RELATIONSHIPS
Computer-aided statistical analysis of the stress-strain state of load-carrying structures
p0131 A78-20267
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917

Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
Some effects of temperature on the erosion of metals
p0588 A78-51594
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KBASH theory
[AD-A055898] p0560 N78-31088
STRESSES
NT COMBINED STRESS
NT CRITICAL LOADING
NT RESIDUAL STRESS
NT REYNOLDS STRESS
NT SHEAR STRESS
NT TENSILE STRESS
NT THERMAL STRESSES
NT VIBRATIONAL STRESS
STRINGERS
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
STRIP
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
STRIP TRANSMISSION LINES
NT MICROSTRIP TRANSMISSION LINES
STRUCTURAL ANALYSIS
NT DYNAMIC STRUCTURAL ANALYSIS
NT FLUTTER ANALYSIS
NT MATRIX METHODS
NT STRAIN ENERGY METHODS
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
The evaluation of several finite elements for the calculation of wing structures
p0119 A78-19051
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
Numerical methods for structural analysis
p0328 A78-33003
Gas path sealing in turbine engines
p0330 A78-33218
Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670
Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration, task 3
[NASA-CR-145192] p0305 N78-20112
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
Civil components program "Wing Section". Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
Active controls technology to maximize structural efficiency
p0497 N78-29053
Rocket structures
p0612 N78-32123
STRUCTURAL BEAMS
U BEAMS (SUPPORTS)
STRUCTURAL DESIGN
A program for the interactive design of wing structures
p0120 A78-19063
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262
Taking structural and technological constraints into account in the design of maximum-stiffness load-bearing structures
p0164 A78-20880
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
Optimum structural design of sheet-stringer panels subjected to jet noise excitation
p0230 A78-27887
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
Future trends in aircraft structural design and materials
[AIAA 78-465] p0280 A78-29822
Alloy needs and design - The airframe
p0285 A78-30856
Mirage 2000 --- French flighter aircraft design characteristics, SNECMA M53 engine and avionics
p0288 A78-31755
The error function of analytical structural design --- in aircraft component failure in static tests
p0291 A78-32123
Optimum design of wind tunnel contractions
[AIAA 78-819] p0297 A78-32373
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659
Supercritical wing sections III --- Book
p0341 A78-35728
Low frequency augmentor instability study --- afterburning effects in turbofan engines
[AIAA PAPER 78-996] p0464 A78-43543
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
Teaching design at all levels --- in aerospace engineering curricula
[AIAA PAPER 78-1455] p0511 A78-47906
Airfield pavement evaluation - FAA viewpoint
p0526 A78-49681
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
Compressibility effects on parachute transient pressures
p0591 A78-51950
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043
Factors of safety: Historical development, state of the art and future outlook
[AGARD-R-661] p0153 N78-15311
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Airplane design for gusts
p0267 N78-19717
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration, task 3
[NASA-CR-145192] p0305 N78-20112

Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2825] p0306 N78-20116
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
Civil components program "Wing Section'. Preliminary design of engine mounting --- and nacelle mounting
[BMFT-FB-W-77-28] p0350 N78-22086
Design of propellers for minimum noise
p0351 N78-22094
A frequency domain approach to handling qualities design
p0357 N78-23019
Numerical design of streamlined tunnel walls for a two-dimensional transonic test
[NASA-TM-78641] p0364 N78-23105
AV-8B composite wing government/industry briefing
p0396 N78-24113
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087
Critical review of various structural safety concepts taking into account NDI methods
p0443 N78-26462
Advanced structural sizing methodology
p0448 N78-27064
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
General aviation airplane structural crashworthiness user's manual. Volume 3: Related design information
[AD-A054266] p0499 N78-29085
Dulles control tower console design study
[AD-A056200] p0566 N78-31132
Modifications and improvements in a structural optimization scheme based on an optimality criterion
[AD-A055941] p0609 N78-32088
Rocket structures
p0612 N78-32123

STRUCTURAL DESIGN CRITERIA
Application of fracture mechanics data to aerospace design
p0050 A78-13414
On the design of aerospace shell structures
p0075 A78-16600
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
Design of load-bearing structures of maximal rigidity
p0129 A78-19707
The need for improved materials in integral aircraft fuel tanks
p0217 A78-25177
Material development for laminar flow control wing panels
p0218 A78-25200
Basic fatigue curves of aircraft structures
p0283 A78-30356
Some specific hydrodynamic and aerodynamic problems of surface-effect ships with sidewalls
p0286 A78-31126
Quality assurance in the fabrication of products in aviation technology
p0292 A78-32267
Sailplanes of carbon-fiber construction
p0382 A78-38804
Theoretical investigation on the crash behavior of cell structures --- aircraft structural design
p0382 A78-38805
Landing gear kinematics
p0468 A78-43762
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
Design philosophy for airframes
p0509 A78-47453
Assessment of the structural-mechanical design of commercial aircraft gas turbine engines
p0578 A78-50625
Design of rotors for improved structural life
p0027 N78-10085
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
A transonic propeller of triangular plan form: An extension
[UTIAS-TN-218] p0454 N78-27123
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111

STRUCTURAL DYNAMICS
U DYNAMIC STRUCTURAL ANALYSIS

STRUCTURAL ENGINEERING
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
Recent progress and technical and economic outlooks in the processing of materials for airframe elements
p0221 A78-26036
Problems of the theory of strength related to aircraft construction and civil engineering; Structural Mechanics Meeting, Ottobrunn, West Germany, June 1, 2, 1977, Lectures and Discussion Contributions
p0382 A78-38802
Turbine disks for improved reliability
p0027 N78-10089
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213
Primary Adhesively Bonded Structure Technology (PABST). Phase 1: Detail design
[AD-A056857] p0626 N78-33095

STRUCTURAL FAILURE
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
The damage sum in fatigue of structure components
p0226 A78-26834
Experimental investigation of composite wing failure
[AIAA 78-509] p0279 A78-29809
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
The error function of analytical structural design --- in aircraft component failure in static tests
p0291 A78-32123
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
Application of failure analysis in aviation
[NLR-MP-77002-U] p0145 N78-14449
The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454
Combat damage tolerance and repair of aircraft structures
[AGARD-R-667] p0491 N78-28088
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095

STRUCTURAL FATIGUE
U FATIGUE (MATERIALS)

STRUCTURAL INFLUENCE COEFFICIENTS
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
Influence of structural components of a by-pass engine on its flight characteristics --- STOL aircraft
p0277 A78-29582

STRUCTURAL MATERIALS
U CONSTRUCTION MATERIALS

STRUCTURAL MEMBERS
NT ANNULAR PLATES
NT BEAMS (SUPPORTS)
NT BOX BEAMS
NT CANTILEVER BEAMS
NT CORRUGATED PLATES
NT ELASTIC PLATES
NT FLAT PLATES
NT PERFORATED PLATES
NT PLATES (STRUCTURAL MEMBERS)
NT POROUS PLATES
NT REINFORCED PLATES
NT SKIN (STRUCTURAL MEMBER)
NT STRINGERS
NT STRUTS
NT TRUSSES
NT WING PANELS
Braiding composites - Adapting the process for the mass production of aerospace components
p0077 A78-16904
Substructure coupling: A different approach
p0091 N78-12455

STRUCTURAL RELIABILITY
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
Structural fatigue reliability based on test results. I
p0057 A78-15025
Reliability of fatigue-stressed structures based on experimental results. II
p0130 A78-20147
Designing the elements of a structure of a given guaranteed indestructibility
p0131 A78-20259
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
Today's non-metallic composite airframe structure - An airline assessment
p0218 A78-25196
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress --- aircraft structural failures
p0332 A78-33700
Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
Aircraft structural fatigue
[ARL/STRUC-REPT-363] p0553 N78-30271
Aircraft structural reliability and risk theory: A review
p0555 N78-30284

STRUCTURAL RIGIDITY
U STRUCTURAL STABILITY
STRUCTURAL STABILITY
NT SHELL STABILITY
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
Rational arrangement of the structural and load-bearing elements of the wing with allowance for certain aerodynamic requirements
p0167 A78-20984
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials
p0169 A78-21971
Dynamic stability of a two blade rotor
[ONERA, TP NO. 1978-32] p0291 A78-32037
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183
On some structure-turbulence interaction problems
p0193 N78-15996

STRUCTURAL STRAIN
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Load sequences for laboratory simulation of flight-by-flight stress spectra --- of aircraft structural fatigue
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231

STRUCTURAL VIBRATION
NT BENDING VIBRATION
NT FLUTTER
NT LINEAR VIBRATION
NT PANEL FLUTTER
NT SELF INDUCED VIBRATION
NT SUPERSONIC FLUTTER
NT TORSIONAL VIBRATION
NT TRANSONIC FLUTTER
Studies to gain insight into the complexities of blade vibration phenomena
p0058 A78-15175
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
The PIO problem - Theory and implications to flight test --- Pilot-Induced Oscillation
p0125 A78-19442
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
Taking into account the effect of elasticity of the structure on the longitudinal short-period motion of an aircraft
p0164 A78-20882
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
Comparative vibration environments of transportation vehicles
p0331 A78-33442
Ride technology applications to large passenger aircraft
p0331 A78-33443
Vibration in helicopters
p0331 A78-33444
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
Measurement of vibratory displacements of a rotating blade
p0524 A78-49397
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
Mathematical model of vortex-excited oscillations of thin, weakly damped structures
p0583 A78-51153

Captive carriage vibration of air-to-air missiles on fighter aircraft --- F-15 flight measurements
p0587 A78-51470
Concorde noise-induced building vibrations: International Airport Dulles --- studies by Langley Research Center
[NASA-TM-74083] p0032 N78-10839
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
A perturbation method for predicting amplitudes of nonlinear wheel shimmy
p0325 N78-21464
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
Considerations on wing stores flutter: Asymmetry, flutter suppression
[AGARD-R-668] p0565 N78-31126
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
STRUCTURAL WEIGHT
Weight and cost in the design arena --- in aircraft development
p0109 A78-17884
Some operational experience of Concorde weight and balance
p0110 A78-17892
C-5 wing modification - Weight and design to cost status
p0110 A78-17897
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684
The weight of fuel tanks in aircraft
p0175 A78-22848
Flight testing an 8000 psi Lightweight Hydraulic System
[SAE PAPER 771007] p0181 A78-23839
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis --- Russian book
p0282 A78-30175
Evolution of the aircraft gas turbine engine
p0282 A78-30257
Requirements for aircraft on board weight and balance system
[SAE ARP 1409] p0472 A78-44692
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
Lightweight engine containment --- Kevlar shielding
p0026 N78-10080
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
Civil components program "Wing Section'. Wing structure parameter study --- effects on wing weight
[BMFT-FB-W-77-30] p0350 N78-22088
STRUTS
An investigation of strut-wall intersection losses
[AIAA PAPER 78-205] p0161 A78-20743
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Buckling of struts. Lipped and unlipped Z sections
[ESDU-77030] p0366 N78-23469
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583
SUBCRITICAL FLOW
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
SUBGRAVITY
U REDUCED GRAVITY
SUBLATTICES
U LATTICES (MATHEMATICS)
SUBMARINES
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] p0457 N78-27184
SUBMERGED BODIES
Mixed ventilated foils --- design for immersed hydrofoils
p0286 A78-31127
The principles of underwater escape from aircraft
[AGARD-AG-230] p0094 N78-13032
SUBMERGING
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
SUBMILLIMETER WAVES
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
SUBSONIC AIRCRAFT
Engineering aluminum alloys for subsonic airframes
p0053 A78-14087
The improvement of various engine installation components in a subsonic transport aircraft
p0057 A78-15022
The measurement of performance and stability and control characteristics of a high subsonic jet aircraft in non-steady flight conditions employing high accuracy instrumentation techniques
p0074 A78-16596
Hydrogen fueled subsonic aircraft - A prospective
p0118 A78-18843
Determination of the aerodynamic forces for an aeroelastic analysis of lifting surfaces
p0120 A78-19064
Getting ready for V/STOL T&E in the 80's --- Test and Evaluation for subsonic and supersonic options
p0123 A78-19431
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
The reduction of the annoyance caused by subsonic jet aircraft noise
p0343 A78-35975
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Aircraft configurations for high-speed ships
[AD-A055540] p0610 N78-32092
SUBSONIC FLOW
Calculation of supercritical flow past a double wedge by Telenin's method
p0011 A78-12301
A method for determining the induced resistance of wings with high aspect ratio in a subsonic regime
p0120 A78-19065
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
Solution of the problem of three-dimensional flow past a delta wing with subsonic edges by a

modification of the Lax-Wendroff method
p0128 A78-19696
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
High-frequency approximation for a nonlifting thin airfoil in subsonic flow
[AIAA PAPER 78-226] p0161 A78-20755
Approximate method of calculating subsonic compressible flows past a lifting wing profile
p0164 A78-20883
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
Successive-approximation calculation of a steady subsonic gas flow about an airfoil lattice
p0186 A78-24085
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
Stability of subsonic gasdynamic flows
p0274 A78-28959
Application of the integral-transformation method to three-dimensional unsteady problems of the theory of cascades
p0370 A78-36366
Cross-flow characteristics on a cylindrical body at incidence in subsonic flow
p0373 A78-37406
Boundary layer blowing tests on a radial diffuser in low and subsonic Mach range
p0374 A78-37411
The mean velocity field of unsteady subsonic air jets
p0374 A78-37417
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
Mach number and temperature effects on jets
[AIAA PAPER 78-1152] p0476 A78-45134
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling performance
p0573 A78-50582
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044
Subsonic, inviscid flow by the finite element method
[WRE-TR-1858(W)] p0147 N78-15005
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392
A Mach line panel method for computing the linearized supersonic flow over planar wings
[NASA-CR-152126] p0450 N78-27087
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
A calculator program for analyzing airloads on a wing of arbitrary planform and camber in subsonic flow
[AD-A054180] p0545 N78-30058

SUBSONIC SPEED
Adaptation for economization, or adaptation for the economization of energy --- in transport aircraft design and operation
p0003 A78-12030
Calculation of the aerodynamic characteristics of a wing moving with subsonic velocity under a slight effect of a shock wave
p0334 A78-34442
Method for calculating the longitudinal, lateral, and cross aerodynamic derivatives of a flight vehicle at subsonic speeds
p0342 A78-35905
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
An experimental and computational investigation of a swept-wing flow at subsonic speeds
[AIAA PAPER 78-1200] p0423 A78-41890
An approximate method of calculating downwash behind a straight wing with unsteady aperiodic motion at subsonic flight speeds
[AD-A044293] p0084 N78-12069
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Theoretical and experimental analysis of longitudinal and lateral aerodynamic characteristics of skewed wings at subsonic speeds to high angles of attack
[NASA-TN-D-8512] p0093 N78-13015
Effects of acoustic and vortical disturbances on the turbulent boundary layer at free-stream Mach number 0.5
[AD-A047921] p0205 N78-17026
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed --- based on potential theory
[BMVG-FBWT-77-15] p0238 N78-18013
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic

characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Some practical limitations to fuel-conservative civil engine technology
[AAAF-NT-77-29] p0351 N78-22092
Amelioration of various components of a subsonic transport aircraft engine
[AAAF-NT-77-31] p0353 N78-22109
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Studies in experimental aerodynamics --- subsonic velocities
[NASA-TT-F-17158] p0450 N78-27086
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
Subsonic dynamic stability characteristics of two close-coupled canard-wing configurations
[NASA-TP-1291] p0622 N78-33050
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118

SUBSONIC WIND TUNNELS
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376
Induction of subsonic wind tunnels with slight perforation
p0519 A78-48250
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Research on unsteady turbulent boundary layers
p0146 N78-14992
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371

SUBSTRUCTURES
Substructure coupling: A different approach
p0091 N78-12455
Superelement method of designing a helicopter fuselage
p0206 N78-17043

SUCTION
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
Development of advanced stability theory suction prediction techniques for laminar flow control --- on swept wings
p0449 N78-27068

SUD AVIATION AIRCRAFT
NT CONCORDE AIRCRAFT
NT SE-3160 HELICOPTER
SUD AVIATION SE-3160 HELICOPTER
U SE-3160 HELICOPTER
SULFIDES
NT WURTZITE
SULFUR COMPOUNDS
NT WURTZITE
SUMMARIES
NT ABSTRACTS
SUPER SABRE AIRCRAFT
U F-100 AIRCRAFT
SUPERALLOYS
U HEAT RESISTANT ALLOYS
SUPERCAVITATING FLOW
Isoperimetric problems of the theory of supercavitated mechanisms
p0477 A78-45172

SUPERCAVITATION
U SUPERCAVITATING FLOW
SUPERCONDUCTING POWER TRANSMISSION
Modeling refinements for the rectified superconducting alternator --- airborne power supply
p0536 A78-49961

SUPERCOOLING
Initial development of a tactical system for dispersing supercooled stratus
[AD-A056570] p0635 N78-33677
SUPERCRITICAL FLOW
Calculation of supercritical flow past a double wedge by Telenin's method
p0011 A78-12301
Supercritical cascade design
p0012 A78-12302
Experiments on supercritical flows in a self-correcting wind tunnel
p0295 A78-32345
Application of supercritical airfoil technology to compressor cascades - Comparison of theoretical and experimental results
[AIAA PAPER 78-1138] p0421 A78-41842
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
Influence of oil-squeeze-film damping on steady-state response of flexible rotor operating to supercritical speeds
[NASA-TP-1094] p0098 N78-13064
The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
Asymmetric supercritical flow past a double wedge with embedded shocks
p0603 N78-32042

SUPERCRITICAL PRESSURES
Study of a supercritical profile with oscillating

control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures
p0580 A78-50780

SUPERCRITICAL WINGS
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
New structuralization and work of current interest in the research area of fluid mechanics --- propulsion systems, aerodynamics and acoustics
p0337 A78-34941
Supercritical wing sections III --- Book
p0341 A78-35728
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
Aerodynamic design of thick, supercritical wings through the concept of equivalent subsonic pressure distribution
[NLR-MP-78011-U] p0477 A78-45230
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
Flow development on a supercritical wing
p0477 A78-45234
The supercritical wing - An evolution or a revolution
p0478 A78-45239
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
An experimental investigation of the drag of thick supercritical aerofoils - A progress report
p0478 A78-45243
Theoretical aspects of dromedaryfoil
[AD-A047150] p0194 N78-16023
Collection of supercritical aerofoils obtained with the NLR hodograph method
[NLR-TR-75115-U] p0237 N78-18009
An aerodynamic investigation of a forward swept wing
[AD-A048898] p0254 N78-19069
Analysis and design of a cooled supercritical airfoil test model --- wall temperature effect on boundary layer stability
[AD-A048895] p0265 N78-19168
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
Flight-measured buffet characteristics of a supercritical wing and a conventional wing on a variable-sweep airplane
[NASA-TP-1244] p0358 N78-23056
Tabulated pressure measurements of a NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2634] p0393 N78-24077
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Wind-tunnel measurements of aerodynamic load distribution on an NASA supercritical-wing research airplane configuration
[NASA-TM-X-2469] p0393 N78-24079
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
Wind-tunnel investigation of effects of trailing-edge geometry on a NASA supercritical airfoil section
[NASA-TM-X-2336] p0450 N78-27079
Design and analysis of a hodograph method for the calculation of supercritical shock-free aerofoils
[NLR-TR-77046-U] p0488 N78-28059
Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
Aerodynamic characteristics induced on a supercritical wing due to vectoring twin nozzles at Mach numbers from 0.40 to 0.95
[NASA-TM-78746] p0543 N78-30039
Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
Control-surface hinge-moment calculations for a high-aspect-ratio supercritical wing
[NASA-TM-78664] p0557 N78-31043

SUPERHIGH FREQUENCIES
Ku Band linear phased array
p0003 A78-11821
Dual band airborne SATCOM terminal
p0537 A78-49972

SUPERIMPOSITION (MATHEMATICS)
U SUPERPOSITION (MATHEMATICS)

SUPERMAGNETS
U HIGH FIELD MAGNETS

SUPERPOSITION (MATHEMATICS)
On the linear superposition of aerodynamic forces on wings in periodic gusts
p0510 A78-47869

SUPERPRESSURE BALLOONS
Aerodynamic hull design for HASPA LTA optimization --- High Altitude Superpressure Powered Aerostat Lighter Than Air
p0517 A78-48100

SUPERSONIC AIRCRAFT
NT CONCORDE AIRCRAFT
NT F-4 AIRCRAFT
NT F-5 AIRCRAFT
NT F-8 AIRCRAFT
NT F-14 AIRCRAFT
NT F-15 AIRCRAFT
NT F-16 AIRCRAFT
NT F-17 AIRCRAFT
NT F-100 AIRCRAFT
NT F-101 AIRCRAFT
NT F-102 AIRCRAFT
NT F-106 AIRCRAFT
NT F-111 AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
NT JAGUAR AIRCRAFT
NT SAAB 37 AIRCRAFT
NT SUPERSONIC COMMERCIAL AIR TRANSPORT
NT SUPERSONIC TRANSPORTS
Advanced design composite aircraft program
p0077 A78-16919
Design considerations in formulating V/STOL lift plus lift/cruise supersonic fighter concepts
p0109 A78-17878
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
Getting ready for V/STOL T&E in the 80's --- Test and Evaluation for subsonic and supersonic options
p0123 A78-19431
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
The location of the ground focus line produced by a supersonic aircraft
p0178 A78-23457
Interavia combat aircraft design analysis. I - Dassault-Breguet Mirage 2000
p0328 A78-32850
Integration of a variable cycle engine concept in a supersonic cruise aircraft
[AIAA PAPER 78-1049] p0466 A78-43574

An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Mirage 2000 - Dassault's better delta
p0523 A78-49169
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
Application of hypersonic favorable aerodynamic interference concepts to supersonic aircraft
[AIAA PAPER 78-1458] p0591 A78-52042
Advanced supersonic propulsion study, phase 4
[NASA-CR-135273] p0038 N78-11062
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration, task 3
[NASA-CR-145192] p0305 N78-20112
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report
[AD-A053362] p0409 N78-25098
YF-17 full scale minimum drag prediction
p0436 N78-26091
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft
[NASA-TM-78530] p0603 N78-32044
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95 --- Langley Unitary Plan wind tunnel tests
[NASA-TM-78706] p0604 N78-32050

SUPERSONIC AIRFOILS
Determination of pressure impulses at supersonic delta wings with incident weak shock waves
p0129 A78-19729
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
Remarks on conical supersonic wings with subsonic leading edges
p0333 A78-34016
Pressure distribution on a symmetrical butterfly wing
p0415 A78-40799
The supercritical wing - An evolution or a revolution
p0478 A78-45239
Calculation of local three-dimensional supersonic fields
p0584 A78-51184

SUPERSONIC BOUNDARY LAYERS
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
Sting effects as determined by the measurement of pitch-damping derivatives and base pressures at Mach number 3
[AIAA 78-830] p0297 A78-32381
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896
Investigations of the intensity of oscillations of the boundary of a turbulent wake
p0586 A78-51402
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19043
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
M=3 turbulent boundary layer measurements at very high Reynolds numbers --- supersonic wind tunnel tests
[AD-A055952] p0607 N78-32072

SUPERSONIC COMBUSTION
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Review of problems in application of supersonic combustion
p0017 N78-10007
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
Interaction between step fuel injectors on opposite walls in a supersonic combustor model
[NASA-TP-1174] p0362 N78-23094
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168

SUPERSONIC COMBUSTION RAMJET ENGINES
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Toward scramjet aircraft --- progress in engine development
p0177 A78-23421
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
Internal performance predictions for Langley scramjet engine module
[NASA-TM-X-74038] p0208 N78-17057
Rectangular capture area to circular combustor scramjet engine
[NASA-TM-78657] p0318 N78-21107
Interaction between step fuel injectors on opposite walls in a supersonic combustor model
[NASA-TP-1174] p0362 N78-23094

SUPERSONIC COMMERCIAL AIR TRANSPORT
SST flight planning and navigation - The first year's experience
p0372 A78-37154
Better marks on pollution for the SST
p0018 N78-10013
The problem of pollution for the SST
[ICAS-PAPER-74-29] p0018 N78-10015
Test procedure analysis and recommendations for supersonic transport aircraft emission measurement
[PB-270864/2] p0102 N78-13634
Reference aircraft for ICAO Working Group E
[NASA-CR-158929] p0609 N78-32087

SUPERSONIC COMPRESSORS
Supersonic axial compressors with predeceleration by oblique shocks
p0119 A78-19045
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
A comparison of the performances of centrifugal compressors with the same impeller and different radial inducers
[ONERA, TP NO. 1978-42] p0479 A78-45282
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611

SUPERSONIC CRUISE AIRCRAFT RESEARCH
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
Technology readiness for an SST
[AIAA PAPER 78-356] p0186 A78-24031
Engine options for supersonic cruise aircraft
[AIAA PAPER 78-1054] p0466 A78-43576
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet --- Supersonic Cruise Aircraft Research
[AIAA PAPER 78-961] p0474 A78-45096
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
A preliminary study of the performance and characteristics of a supersonic executive aircraft

[NASA-TM-74055] p0095 N78-13040
Advanced supersonic propulsion study, phases 3 and 4 --- variable cycle engines
[NASA-CR-135236] p0097 N78-13058
Real-time testing of titanium sheet and extrusion coupon specimens subjected to Mach 2.7 supersonic cruise aircraft wing stresses and temperatures
[NASA-CR-2754] p0101 N78-13478
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2825] p0306 N78-20116
Progress in supersonic cruise aircraft technology
[NASA-TM-78695] p0358 N78-23047
Supersonic through-flow fan engines for supersonic cruise aircraft
[NASA-TM-78889] p0361 N78-23088
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125
High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft
[NASA-TM-78530] p0603 N78-32044
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055
Overview of the NASA YF-12 program
p0605 N78-32056
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
The YF-12 gust velocity measuring system
p0605 N78-32061
The common case study: Lockheed design of a supersonic cruise vehicle
[NASA-CR-158935] p0625 N78-33086

SUPERSONIC DIFFUSERS
Flow starting times in constant-area supersonic diffusers
p0076 A78-16810
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332

SUPERSONIC DRAG
External drag and base pressure of fuselage tail sections of various configuration
p0128 A78-19683
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0 --- supersonic heat transfer and skin friction
p0606 N78-32065

SUPERSONIC FLIGHT
The effect of blunting the leading edge of a delta wing on its aerodynamic characteristics during supersonic flight
p0166 A78-20920
Drag formula for elongated aircraft noses
p0278 A78-29718
Supersonic aerothermal testing - A new requirement
[AIAA 78-773] p0294 A78-32333
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
Comparison of the characteristics of bypass turbojet engine employing a small-size gas-turbine in the outer duct with those of a turbojet engine in supersonic cruising flight
p0581 A78-50790
Mathematical analysis of impact erosion --- of supersonic flight vehicles
p0588 A78-51711
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
Evaluation of windshield materials subjected to simulated supersonic flight
[AD-A049981] p0317 N78-21101
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059

SUPERSONIC FLOW
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
Use of the vorticity method in computing the aerodynamic characteristics of a thin wing in a steady supersonic flow
p0126 A78-19626
Obtaining exact solutions for shock-free flow past a symmetrical airfoil profile with a local supersonic zone
p0127 A78-19668
Nonequilibrium reverse flow in a Laval nozzle
p0128 A78-19681
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
Pressure distribution over sharp-nosed cones situated at angles of attack from 0 to 10 degrees in supersonic flow
p0165 A78-20889
Inviscid supersonic flow about a thin rectangular plate
p0165 A78-20906
Supersonic flow near a thin trapezoidal wing
p0166 A78-20921
Two new correlation dependencies for parameters of flow on a plane delta wing
p0166 A78-20933
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
Nearly wedge-shaped antisymmetric wing in supersonic flow
p0170 A78-22080
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies
p0186 A78-24096
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
The supersonic flow past cusped wings
p0230 A78-28056

Calculation of supersonic flows past wings with allowance for trailing tangential discontinuities within the framework of a model employing a system of Euler equations
p0274 A78-28958
Normal force of a flat triangular wing in a supersonic flow
p0278 A78-29720
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Small perturbation theory for supersonic jets
[AIAA PAPER 78-1151] p0421 A78-41851
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Possibilities of phase separation in supersonic two-phase flows
p0426 A78-42630
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
Mach number and temperature effects on jets
[AIAA PAPER 78-1152] p0476 A78-45134
Supersonic flow over sharp-edged wings
p0480 A78-46091
Linearized theory of plane, unsteady, supersonic flow through a cascade - Subsonic part of the leading edge
[ONERA, TP NO. 1978-103] p0508 A78-47347
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
Model calculations of the generation of self-excited oscillations in a supersonic duct with stepwise widening of cross section
p0584 A78-51165
Self-focusing of a Gaussian beam in a supersonic gas flow
p0585 A78-51387
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
Two different theoretical approaches to the base pressure problem in two-dimensional supersonic flow
p0600 A78-53767
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
A new technique for controlling the exit flow periodicity of supersonic cascades --- throttling with slotted tailboard
p0045 N78-11330
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
LASTOP: A computer code for laser turrets optimization of small perturbation turrets in subsonic or supersonic flow
[AD-A049272] p0255 N78-19076
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control --- in the Langley Unitary Plan Wind Tunnel
[NASA-TP-1124] p0301 N78-20079
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
Supersonic flow-around of thin bodies with Mach number close to unity
[AD-A051884] p0358 N78-23059
Supersonic through-flow fan engines for supersonic cruise aircraft
[NASA-TM-78889] p0361 N78-23088
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
The lifting wing with minimum drag in supersonic flow
[VTH-LR-234] p0488 N78-28065
Linearized supersonic unsteady flow in cascades
[ARC-R/M-3811] p0545 N78-30065
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
Unsteady blade rows in high-speed flow
[AD-A055620] p0615 N78-32391

SUPERSONIC FLOW INLETS
U SUPERSONIC INLETS

SUPERSONIC FLUTTER
The characteristics, prediction and test analysis of supersonic flutter in turbofan engines
p0058 A78-15176

SUPERSONIC HEAT TRANSFER
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0 --- supersonic heat transfer and skin friction
p0606 N78-32065

SUPERSONIC INLETS
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet --- Supersonic Cruise Aircraft Research
[AIAA PAPER 78-961] p0474 A78-45096
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
Mechanical characteristics of stability-bleed valves for a supersonic inlet --- for the YF-12 aircraft
[NASA-TM-X-3483] p0098 N78-13063
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control --- Lewis 10 by 10 ft supersonic wind tunnel tests
p0605 N78-32062
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168

SUPERSONIC JET FLOW
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670

Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469
Interaction of a shock wave with an entropy layer
p0164 A78-20886
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
Calculating the interaction of a turbulent near wake behind a step and a supersonic jet
p0230 A78-28057
Prospects for supersonic jet noise suppression
p0329 A78-33089
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743
Calculation of interaction of a turbulent near-wake behind a step with a supersonic jet
p0480 A78-46092
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448

SUPERSONIC NOZZLES
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
Computation of the base pressure in ejector nozzles of different length with zero coefficient of ejection
p0168 A78-21098
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle
p0379 A78-38641
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792

SUPERSONIC SPEEDS
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099
Supercruiser fighter analysis
p0549 N78-30107
Wind-tunnel investigation at supersonic speeds of a canard-controlled missile with fixed and free-rolling tail fins
[NASA-TP-1316] p0606 N78-32067
Estimation of leading-edge thrust for supersonic wings of arbitrary planform
[NASA-TP-1270] p0623 N78-33051
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118

SUPERSONIC TRANSPORTS
NT CONCORDE AIRCRAFT
NT SUPERSONIC COMMERCIAL AIR TRANSPORT
Why fly supersonically --- flight time reduction vs fuel consumption and low payload
p0109 A78-17889
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
Technology readiness for an SST
[AIAA PAPER 78-356] p0186 A78-24031
Problems of supersonic transport
[DGLR PAPER 77-007] p0188 A78-24404
Supersonic transports --- drag minimization techniques
p0286 A78-31152
Supersonic transport in terms of energy savings
p0342 A78-35893
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
Propulsion system airframe integration studies - Advanced supersonic transport
[AIAA PAPER 78-1053] p0521 A78-48488
The aerodynamic performance of a freely hinged door between two flows --- for supersonic transport propulsion nozzles
p0586 A78-51464
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Possibilities and goals for the future SST
[AIAA-PAPER-75-254] p0017 N78-10006
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
Practical aspects of sonic boom problems
[ICAS-PAPER-70-23] p0018 N78-10011
Advanced supersonic propulsion study, phases 3 and 4 --- variable cycle engines
[NASA-CR-135236] p0097 N78-13058
Low-speed aerodynamic characteristics from wind-tunnel tests of a large-scale advanced arrow-wing supersonic-cruise transport concept
[NASA-CR-145280] p0312 N78-21053
Supersonic transportation faced with energy savings
[AAAF-NT-77-28] p0397 N78-24131
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
Supersonic transport --- using canard surfaces
[NASA-CASE-LAR-11932-1] p0609 N78-32086

SUPERSONIC TURBINES
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft
[NASA-TM-73816] p0102 N78-13854
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107

SUPERSONIC WAKES
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437

Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
SUPERSONIC WIND TUNNELS
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
Remarks on design of supersonic wind tunnels
p0369 A78-36216
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
Description of the new regulating valve for the transonic supersonic wind tunnel
[DLR-IB-151-76/6] p0044 N78-11130
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
M=3 turbulent boundary layer measurements at very high Reynolds numbers --- supersonic wind tunnel tests
[AD-A055952] p0607 N78-32072
SUPPORT INTERFERENCE
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
Sting effects as determined by the measurement of pitch-damping derivatives and base pressures at Mach number 3
[AIAA 78-830] p0297 A78-32381
SUPPORT SYSTEMS
NT GROUND OPERATIONAL SUPPORT SYSTEM
NT GROUND SUPPORT SYSTEMS
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900
Digital avionics support - A retrospective view of the future
p0533 A78-49903
SUPPORTS
NT PYLONS
Natural vibrations of a rigid rotor mounted on elastic ball bearings
p0582 A78-51015
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
Design study of a centerplate mount for wind tunnel models
[AD-A047204] p0201 N78-16073
SUPPRESSORS
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359
SURFACE COOLING
Protection of cooled blades of complex internal structure
p0321 N78-21141
SURFACE CRACKS
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
On the detection and measurement of cracks in critically loaded holes
p0444 N78-26469
SURFACE DISTORTION
Elastic deformations of rapidly-rotating prismatic mirrors
p0168 A78-21374
SURFACE EFFECT SHIPS
Some specific hydrodynamic and aerodynamic problems of surface-effect ships with sidewalls
p0286 A78-31126
Dynamic response of lift fans subject to varying backpressure --- for Surface Effect Ships
[AIAA PAPER 78-756] p0292 A78-32176
A compass for the crystal ball --- naval research on surface and ground effect vehicles
p0429 A78-43225
SURFACE FINISHING
Article quality index realization logic-block diagram --- in aircraft industry quality control
p0049 A78-13179
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
Quality assurance in the fabrication of products in aviation technology
p0292 A78-32267
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
Adhesion of erosion resistant tapes on several surface configurations
[FOK-R-2132] p0442 N78-26220
SURFACE GEOMETRY
Analysis and calculation of plane skew symmetric contours of second-order smoothness --- for channel surface design
p0174 A78-22636
Minimum drag surfaces --- for traveling projectiles
p0342 A78-35787
Circles, texture, etc. - Alternate approaches to CIG scene detail --- computer image generation for flight simulators
[AIAA 78-1578] p0579 A78-50659
SURFACE INTERACTIONS
U SURFACE REACTIONS
SURFACE LAYERS
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
Surface corrosion evaluation by relative magnetic susceptibility measurements
p0443 N78-26466
SURFACE NAVIGATION
Advanced navigation techniques using multiple systems
[AIAA 77-1554] p0051 A78-13652
Positioning and navigation by satellite --- for marine operations
[AIAA 77-1553] p0051 A78-13684
Considerations on the selection of a radionavigation system for the coasts of France
p0073 A78-16352
Navigating Canada, to the end of the twentieth century
p0111 A78-17907
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
The Omega radionavigation system comes to the Pacific Ocean area
p0525 A78-49660
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
The use of Doppler-shift position lines in satellite navigation systems
p0590 A78-51890
SURFACE PRESSURE
U PRESSURE

SURFACE PROPERTIES
NT SURFACE CRACKS
NT SURFACE ROUGHNESS
NT SURFACE TEMPERATURE
NT WALL TEMPERATURE
Modeling the influence of the ground effect on the aerodynamic characteristics of a wing by means of a flat screen of finite dimensions
p0174 A78-22634
Modeling ground plane influence on wing aerodynamic characteristics using a finite plane screen
p0518 A78-48216
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
SURFACE REACTIONS
Surface current and charge density induced on aircraft
p0169 A78-21990
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
SURFACE ROUGHNESS
Runway roughness characterization by DDS approach --- Dynamic Data System
p0284 A78-30679
Collection of commercial aircraft characteristics for study of runway roughness
[AD-A042623/9] p0030 N78-10118
Methodology for determining, isolating, and correcting runway roughness --- using aircraft dynamic response
[AD-A044328/3] p0099 N78-13078
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
Airfield pavement smoothness requirements --- based on riding quality and aircraft response to runway roughness
[AD-A050921] p0502 N78-29111
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
SURFACE ROUGHNESS EFFECTS
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands --- gas turbine engines
[NASA-CR-135307] p0459 N78-27427
SURFACE TEMPERATURE
NT WALL TEMPERATURE
Wear studies on aircraft brake materials
p0177 A78-23433
Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
Effect of temperature-dependent heat capacity on aerodynamic ablation of melting bodies
p0571 A78-50455
Temperature profiles of rotating cooled blade --- via infrared photography of air-cooled turbine blades
p0573 A78-50581
SURFACE TO SURFACE MISSILES
NT ANTITANK MISSILES
NT CRUISE MISSILES
SURFACE TREATMENT
U SURFACE FINISHING
SURFACE VEHICLES
NT AIRCRAFT CARRIERS
NT AUTOMOBILES
NT MAGNETIC LEVITATION VEHICLES
NT MOTOR VEHICLES
NT NUCLEAR POWERED SHIPS
NT SURFACE EFFECT SHIPS
NT SWATH (SHIP)
NT TRUCKS
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
Comparative vibration environments of transportation vehicles
p0331 A78-33442
Mitsubishi Passenger Transfer Vehicle Model 150
p0429 A78-43298
The development of a regenerator seal for vehicular use --- for automatic gas turbine engines
p0574 A78-50587
SURFACE WAVES
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327
SURFACES
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface --- YF-12A ventral fins
p0605 N78-32058
SURGES
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Surge responsibility and range characteristics of centrifugal compressors
p0577 A78-50616
SURVEILLANCE
NT SPACE SURVEILLANCE (SPACEBORNE)
SURVEILLANCE RADAR
NT AIRBORNE SURVEILLANCE RADAR
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634
The technology for the automatic tracking of targets of surveillance and secondary radar
p0073 A78-16377
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
Ground radar - Vital tool or luxury --- for aircraft surface movements
p0289 A78-31869
Airport traffic surveillance
p0594 A78-52957
Moving target detector /MTD/ radar system
p0595 A78-52963
DABS coverage
[AD-A045940] p0139 N78-14022
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
Airport surface traffic control TAGS planning alternatives and cost/benefit analysis
[AD-A037790] p0196 N78-16038
Preliminary limited surveillance radar (LSR) cost/benefit analysis
[AD-A046829] p0201 N78-16245
Development of a discrete address beacon system --- testing monopulse beacon antennas
[AD-A048247] p0206 N78-17036
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
SURVEYING
U SURVEYS
SURVEYS
NT GEODETIC SURVEYS
Synthesis of social surveys on noise annoyance
p0517 A78-48051
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620

SURVIVAL EQUIPMENT
Survival after a crash
p0072 A78-16280
Downed Airman Power Source (DAPS) for inclusion into the RSSK-8A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044483] p0083 N78-12052
Downed Airman Power Source (DAPS) for inclusion into the RSSK-1A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044481] p0083 N78-12053
SUSCEPTIBILITY (MAGNETISM)
U MAGNETIC PERMEABILITY
SUSPENDING (HANGING)
NT MAGNETIC SUSPENSION
SUSPENSION SYSTEMS (VEHICLES)
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583
SWASH
U SPLASHING
SWATH (SHIP)
A compass for the crystal ball --- naval research on surface and ground effect vehicles
p0429 A78-43225
SWEAT COOLING
Some problems of GTE blade transpiration cooling
p0049 A78-13166
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
Turbojet engine performance at high turbine entry temperatures with transpiration cooled turbine blading
p0351 N78-22095
SWEDEN
Sweden's latest- and last --- airport
p0289 A78-31868
SWEEP EFFECT
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
SWEPT FORWARD WINGS
NT TRAPEZOIDAL WINGS
Grumman's radio-controlled experimental air force
p0379 A78-38522
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
The performance of a conceptual multimission power-augmented-ram wing-in-ground effect vehicle
[AD-A051433] p0359 N78-23064
SWEPT WINGS
NT ARROW WINGS
NT DELTA WINGS
NT SWEPT FORWARD WINGS
NT SWEPTBACK WINGS
NT TRAPEZOIDAL WINGS
Asymptotic theory of the swept wing
p0052 A78-14053
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
The supersonic flow past cusped wings
p0230 A78-28056
An experimental and computational investigation of a swept-wing flow at subsonic speeds
[AIAA PAPER 78-1200] p0423 A78-41890
The calculation of transonic flow over three-dimensional swept wings using the exact potential equation
p0477 A78-45232
Supersonic flow over sharp-edged wings
p0480 A78-46091
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
Low-speed wind-tunnel tests of the longitudinal stability characteristics of some swept-wing quiet Airbus configurations
[AEC-R/M-3801] p0141 N78-14042
Leading edge transition on swept wings
p0144 N78-14336
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer, exemplified with a transonic wing
[BMVG-FBWT-77-7] p0237 N78-18010
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external stores
[DLR-FB-77-21] p0238 N78-18014
An aerodynamic investigation of a forward swept wing
[AD-A048898] p0254 N78-19069
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050
Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
Numerical calculation of transonic flow past a swept wing by a finite volume method
[NASA-CR-157012] p0403 N78-24808
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Development of advanced stability theory suction prediction techniques for laminar flow control --- on swept wings
p0449 N78-27068
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
Calculation of laminar boundary layers on infinite swept wings based on Thwaites two-dimensional method
[FFA-AU-1431] p0488 N78-28061
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064
Phenomenological aspects of quasi-stationary controlled and uncontrolled three-dimensional flow separations --- in relation to aircraft design considerations and swept wings
p0493 N78-28402
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
SWEPTBACK WINGS
NT ARROW WINGS
NT DELTA WINGS
NT TRAPEZOIDAL WINGS
Design of a transonically profiled wing
[DGLR PAPER 77-026] p0189 A78-24417
Design and analysis of winglets for military aircraft, phase 2
[AD-A046152] p0140 N78-14035
Calculation of the lift of partially-stalled wings
[NAL-TR-498T] p0252 N78-19054
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061

Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
SWIRLING
Study of a turbomachine combustor with swirling flow
[ONERA, TP NO. 1977-170] p0108 A78-17662
Transonic swirling gas flow through a nozzle
p0170 A78-22355
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
Swirl flow in conical diffusers
p0230 A78-27910
Unsteady fluid flow in a swirl injector
p0581 A78-50781
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
SWIRLING WAKES
U TURBULENT WAKES
SWITCHES
NT SWITCHING CIRCUITS
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
SWITCHING
NT BEAM SWITCHING
SWITCHING CIRCUITS
Visually Activated Switching System --- using helmet-mounted IR transmitter for avionics control
p0067 A78-15669
A high-power switching network for a dual-mode antenna --- for airborne transmitter application
p0383 A78-38844
SWITCHING ELEMENTS
U SWITCHING CIRCUITS
SWITCHING THEORY
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051
SYMBOLS
Air Force electronically generated symbology standardization
p0067 A78-15670
ATE and avionics display systems
p0417 A78-40924
Development of a symbology exerciser for display generation and analysis on the visually-coupled airborne systems simulator (VCASS)
[AD-A055464] p0630 N78-33124
SYMMETRICAL BODIES
NT AXISYMMETRIC BODIES
NT BODIES OF REVOLUTION
NT CONICAL BODIES
NT CYLINDRICAL BODIES
NT ELLIPSOIDS
NT FAIRINGS
NT ROTATING CYLINDERS
NT SLENDER CONES
NT SPHERES
NT STREAMLINED BODIES
SYNCHRONISM
NT FREQUENCY SYNCHRONIZATION
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
SYNCHRONIZATION
U SYNCHRONISM
SYNCHRONOUS DETECTORS
U CORRELATORS
SYNCHRONOUS MOTORS
Linear machine power requirements and system comparisons --- for German magnetic levitation revenue vehicles
p0585 A78-51271
SYNCHRONOUS SATELLITES
NT AEROSAT SATELLITES
SYNTHETIC FIBERS
NT GLASS FIBERS
Development of fiber shields for engine containment --- mathematical models
p0026 N78-10079
Lightweight engine containment --- Kevlar shielding
p0026 N78-10080
Flutter analysis of a glider made of synthetic materials
[NASA-TM-75160] p0079 N78-12012
Design and development of helicopter external cargo sling legs made with Kevlar
[AD-A056951] p0626 N78-33093
SYNTHETIC FUELS
Future fuels for aviation
[ONERA, TP NO. 1977-156] p0057 A78-15021
Jet fuels from synthetic crudes
p0461 A78-43415
Gas turbine engine fuel from synthetic crude
p0461 A78-43416
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
Alternate fuels nitrogen chemistry
[AD-A053299] p0411 N78-25240
Aviation fuels beyond the 1980's --- liquefied gases and synthetic fuels
[NASA-TM-79510] p0442 N78-26223
Progress on coal-derived fuels for aviation systems
p0497 N78-29063
SYNTHETIC RESINS
NT EPOXY RESINS
NT KEVLAR (TRADEMARK)
NT THERMOPLASTIC RESINS
SYNTHETIC RUBBERS
NT ELASTOMERS
SYSTEM EFFECTIVENESS
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
Evaluation of geometric performance of global positioning system
p0378 A78-37987
A programmable display test unit
p0417 A78-40917
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
Modular target acquisition and designation systems
p0536 A78-49954
A parametric analysis of TERCOM false fix probability --- TERrain COntour Matching
p0539 A78-49997
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas --- ground based control
[AD-A053938] p0452 N78-27106
TRSB microwave landing system demonstration program at Buenos Aires, Argentina
[AD-A054451] p0489 N78-28071
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
SYSTEM FAILURES
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
Sensor failure detection using analytical redundancy
p0182 A78-23862
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
A major refurbishing program for the NAE 5-ft. x 5-ft. blowdown wind tunnel

p0415 A78-40725
General aviation flight instrument displays
p0425 A78-42514
Triplex digital fly-by-wire redundancy management techniques
[AIAA 78-1279] p0541 A78-50187
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
SYSTEMS ANALYSIS
TIES - Tactical information exchange system --- in avionics
[AIAA 77-1498] p0006 A78-12246
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
B-1 terrain following
p0125 A78-19447
Systems analysis of safety in aviation. I
p0178 A78-23470
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
Get acquainted with scanning-beam MLS --- reviewing capabilities and parameters
p0416 A78-40844
The value of aerospace design synthesis courses as viewed by aerospace professionals
[AIAA PAPER 78-1493] p0515 A78-47934
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
Dynamic analysis of electrical systems
p0535 A78-49934
Strategic or tactical air traffic control
p0570 A78-50447
A system concept of metering and spacing --- for aircraft landing approach
p0595 A78-52968
System measurement improves computer responses to the controller --- for air traffic control
p0596 A78-52974
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
Accuracy considerations on new Microwave Landing Systems (MLS) from an operational point of view
p0315 N78-21081
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
A maintenance model for k-out-of-n subsystems aboard a fleet of advanced commercial aircraft
[NASA-CR-145272] p0345 N78-22020
Logistics and operational effectiveness of the P-3 aircraft
[AD-A052239] p0404 N78-25050
An investigation of short haul air transportation in the southeastern United States
[NASA-CR-152166] p0451 N78-27094
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
SYSTEMS DESIGN
U SYSTEMS ENGINEERING
SYSTEMS ENGINEERING
NT COMPUTER SYSTEMS DESIGN
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Airline viewpoint on systems development and integration --- avionics information processing
[AIAA 77-1496] p0006 A78-12244
DAIS - Design and performance --- Digital Avionics Information System
[AIAA 77-1499] p0006 A78-12247
An approach to system integration /BASIC/ --- Basic Avionic Subsystem Integration Concept for Navy weapons system program
[AIAA 77-1500] p0006 A78-12248
Technical, economic and operational aspects of an FAA engineering study and feasibility determination for a ground-based warm fog dispersal system
p0056 A78-14993
A modern warm fog dispersal system
p0056 A78-14994
A contractor's perception of design to life cycle cost
p0060 A78-15553
Advanced environmental control for avionic systems
p0060 A78-15559
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
Robustness of linear quadratic state feedback designs in the presence of system uncertainty --- application to Augmentor Wing Jet STOL Research Aircraft flare control autopilot design
p0184 A78-23917
Aircraft electrical equipment --- Russian book
p0192 A78-24475
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
Requirements for aircraft on board weight and balance system
[SAE ARP 1409] p0472 A78-44692
Avionics first principles. IV - Automatic flight control
p0480 A78-45926
Modeling and parameter uncertainties for aircraft flight control system design
[AIAA 78-1371] p0484 A78-46558
Teaching design at all levels --- in aerospace engineering curricula
[AIAA PAPER 78-1455] p0511 A78-47906
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
The value of aerospace design synthesis courses as viewed by aerospace professionals
[AIAA PAPER 78-1493] p0515 A78-47934
A systems approach to heliport lighting
p0523 A78-49238
Design and development of a multifunctional helicopter control system
p0524 A78-49396
The U.S. Navy bets on V/STOL --- technological integration for next generation aircraft design
p0525 A78-49550
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
Comparisons of high anti-jam design techniques for GPS receivers --- Global Positioning System
p0530 A78-49857
A hierarchical network for avionic systems
p0532 A78-49868
Digital system architecture for a 1980's jammer --- for military aircraft and ships
p0537 A78-49973
A more fully Automated En Route ATC system
p0595 A78-52959
Overview of potential ATC developments
p0596 A78-52970
Concept and future plans for automation of air traffic control in the Federal Republic of Germany
p0596 A78-52972
Numerical calculation of magnetic levitation systems
p0600 A78-53805
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
Instrument landing system improvement program: Far-field monitoring
[AD-A042320/2] p0024 N78-10063
The determination of some requirements for a helicopter flight research simulation facility
[NASA-CR-152066] p0030 N78-10117

Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
Development of a Discrete Address Beacon System
[AD-A046580] p0139 N78-14029
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061
Design of noninteracting flight control systems in the presence of large parameter variations
[NASA-CR-155589] p0200 N78-16064
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070
Gondola system for helicopter transport of external cargo
[AD-A047560] p0306 N78-20120
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
Three degree intermediate level maintenance of Navy aeronautical materials
[AD-A052389] p0389 N78-24042
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
Avionics planning guidance: Executive summary
[AD-A054719] p0500 N78-29098
The technology assessment of LTA aircraft systems --- hybrid airships for passenger and cargo transportation
[NASA-TM-75535] p0603 N78-32043
Strapdown system redundancy management flight demonstration --- vertical takeoff and landing aircraft
[NASA-CR-145356] p0608 N78-32079
Engineering and Scientific Data Management
[NASA-CR-2055] p0635 N78-33776

SYSTEMS MANAGEMENT
AIDS in engine management programmes --- Airborne Integrated Data Systems
p0510 A78-47865
Management of software development for advance ATC systems
p0595 A78-52961
Aerosat communication management
p0365 N78-23307

SYSTEMS STABILITY
A root locus property of the extended Bass algorithm
p0053 A78-14349
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials
p0169 A78-21971
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
Design of noninteracting flight control systems in the presence of large parameter variations
[NASA-CR-155589] p0200 N78-16064

T

T TAIL SURFACES
Comment on 'Effect of stabilizer dihedral and static lift on T-tail flutter'
p0416 A78-40800
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394

T-37 AIRCRAFT
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539

T-38 ENGINE
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131

T-55 ENGINE
Radiographic examination of T55 engine
[AD-A055108] p0564 N78-31113

T-58 ENGINE
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592

TABLES (DATA)
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079

TACAN
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078

TACT PROGRAM
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577

TACTICAL AIR NAVIGATION
U TACAN

TAIL ASSEMBLIES
Low-cost composite primary structure --- for B-1 aircraft vertical stabilizer
p0069 A78-15855
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
Ideal tail load for minimum aircraft drag
p0231 A78-28149
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
Material selection for the Tornado taileron
p0383 A78-38811
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394
Minimum trimmed drag and optimum c.g. position --- center of gravity
p0473 A78-44831
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041

Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Evaluation of a circulation control tail boom for yaw control --- OH-6 helicopter
[AD-A055116] p0564 N78-31119

TAIL MOUNTINGS
U TAIL ASSEMBLIES
TAIL PLANES
U HORIZONTAL TAIL SURFACES
TAIL ROTORS
NT HELICOPTER TAIL ROTORS
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
Quiet propeller/rotor concept evaluation --- of the UH-1 helicopter
[AD-A047297] p0197 N78-16047
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
Bearingless tail rotor loads and stability
[AD-A049579] p0317 N78-21098
Antitorque training: Evaluation of effectiveness in reducing mishap losses
[AD-A055040] p0561 N78-31092
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise --- langley anechoic noise facility
p0620 N78-32827

TAIL SURFACES
NT HORIZONTAL TAIL SURFACES
NT T TAIL SURFACES
External drag and base pressure of fuselage tail sections of various configuration
p0128 A78-19683
Fatigue life analysis of the L 13 /Blanik/ glider
p0283 A78-30360

TAILLESS AIRCRAFT
NT P-102 AIRCRAFT
NT F-106 AIRCRAFT
NT HP-115 AIRCRAFT
TAILS (ASSEMBLIES)
U TAIL ASSEMBLIES
TAKEOFF
NT VERTICAL TAKEOFF
The influence of runway irregularities on the dynamic behavior of aircraft at takeoff
[ONERA, TP NO. 1977-147] p0003 A78-12034
The energy costs of some noise abatement procedures
p0288 A78-31313
Takeoff performance of STOL aircraft
p0527 A78-49744
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
Validation of a Flexible Aircraft Take-Off and Landing Analysis (FATOLA)
[NASA-TP-1025] p0022 N78-10049
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
V/STOL flying qualities requirements in the UK --- control during short takeoff
p0258 N78-19103
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
The design and simulation of a takeoff stabilization system for an aircraft with an air cushion landing system
[AD-A053220] p0440 N78-26137
Simulation and analysis of wind shear hazard --- for aircraft landing and takeoff
[NASA-CR-157470] p0504 N78-29699

TAKEOFF RUNS
Launching the Harrier from a ski jump
p0234 A78-28463
Aircraft takeoff from dirt airstrips
p0293 A78-32273
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
VTOL aircraft dynamics --- Russian book
p0598 A78-53428

TAKEOFF SYSTEMS
U AIRCRAFT LAUNCHING DEVICES
TANDEM ROTOR HELICOPTERS
NT CH-47 HELICOPTER
TANDEM WING AIRCRAFT
Tandem-wing aircraft
p0014 A78-12616

TANKER AIRCRAFT
Tomorrow's tanker --- air-air refueling aircraft
p0077 A78-17099
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070

TANKS (CONTAINERS)
NT FUEL TANKS
NT WING TANKS
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051

TANTALUM
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152

TAPER
U TAPERING
TAPERED WINGS
U SWEPT WINGS
TAPERING
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer exemplified with a transonic wing
[BMVG-FBWT-77-7] p0237 N78-18010

TARE (DATA REDUCTION)
U DATA REDUCTION
TARGET ACQUISITION
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
Wright-Patterson Air Force Base laser tracker
p0124 A78-19437
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
Digital area correlation tracker
p0536 A78-49951
Modular target acquisition and designation systems
p0536 A78-49954
Autothreshold autoscreener/FLIR system --- airborne target screener/Forward-Looking Infrared imaging system
p0538 A78-49984
Moving target detector /MTD/ radar system
p0595 A78-52963

TARGET DRONE AIRCRAFT
NT FIREBEE 2 TARGET DRONE AIRCRAFT
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079

TARGET RECOGNITION
A-6E TRAM --- Target Recognition Attack Multisensor system retrofit for all-weather operations
p0051 A78-13650
On the possibility of classifying radar targets with a coherently measured echo signal --- German book
p0293 A78-32308
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
Infrared receiver performance --- airborne warning system by detection of target spectral signature
p0538 A78-49985
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DLR-IB-553-75/9] p0146 N78-14895
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083

TARGET SIMULATORS
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363 --- visual display training simulator devices
[AIAA 78-1580] p0579 A78-50661
TASK COMPLEXITY
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
TASKS
NT AUDITORY TASKS
NT VISUAL TASKS
TAXIING
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
Airport surface traffic control visual ground aids engineering and development plan
[AD-A038153] p0196 N78-16037
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
TCV PROGRAM
U TERMINAL CONFIGURED VEHICLE PROGRAM
TDMA
U TIME DIVISION MULTIPLE ACCESS
TEACHING
U EDUCATION
TECHNOLOGICAL FORECASTING
The timing of technology for commercial transport aircraft
p0001 A78-10192
Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
The next generation of commercial aircraft - International perspective
p0057 A78-15087
The next engine decision - Why it takes so long --- for passenger airliners
p0058 A78-15090
Commercial air transport - The next ten years
p0058 A78-15091
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
Alternative hydrocarbon fuels for aviation
p0060 A78-15400
Advancing transport aircraft technology towards 2000
p0078 A78-17135
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
V/STOL presentation --- for future Navy applications
p0109 A78-17880
Omega Navigation System - Present status and plans 1977-1980
p0112 A78-17916
Commercial aviation future progress, programs, proposals and problems - A prognosis /W. Bupert Turnbull Lecture/
p0112 A78-18034
Getting ready for V/STOL T&E in the 80's --- Test and Evaluation for subsonic and supersonic options
p0123 A78-19431
Fighters for the 1990s - Building on today's technology
p0130 A78-20188
A new approach to future airport planning
p0134 A78-20482
Trends and research opportunities in airbreathing propulsion
[AIAA PAPER 78-44] p0157 A78-20652
VSTOL - Can Navy needs be met
[AIAA PAPER 78-322] p0185 A78-24016
Return of the propeller
p0220 A78-25516
Future CTOL aircraft characteristics
p0229 A78-27542
US Navy examining a wide range of V/STOL concepts
p0274 A78-291 75
General aviation energy-conservation research programs at NASA-Lewis Research Center --- for non-turbine general aviation engines
p0276 A78-293 30
Future trends in aircraft structural design and materials
[AIAA 78-465] p0280 A78-298 22
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-313 07
The airport city and the future intermodal transportation system --- Book
p0336 A78-34 724
The design of future cockpits for high performance fighter aircraft
p0370 A78-36 446
Airships - The next generation and beyond
p0386 A78-39 196
Automation in transportation in 1990 --- overview
p0416 A78-406 67
The ZTL/KEL program in the preliminary phase of future military projects
p0470 A78-446 18
The U.S. Navy bets on V/STOL --- technological integration for next generation aircraft design
p0525 A78-495 50
Digital system architecture for a 1980's jammer --- for military aircraft and ships
p0537 A78-4997 3
Airports in the year 2000 - Suggestions for improving capacity
p0570 A78-5043 5
Technical-economic analysis of the direct operating costs of air transport companies --- German thesis
p0589 A78-51752
The shape of airliners to come
p0589 A78-51817
Design concepts for future air freighters
p0592 A78-52450
Aviation futures to the year 2000
p0595 A78-52966
ATC in the year 2000
p0596 A78-52978
Helicopter manufacturing technology. III - Future manufacturing technologies
p0597 A78-5317
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-1571 2
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-1571 3
Projected needs of US Army Aviation
p0261 N78-191 27
German Army helicopter development and prospects for the future
p0261 N78-191 28
British Military helicopter programmes
p0262 N78-191 30
Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-197 78
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-197 84
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist --- computer systems design
p0269 N78-1978
Area navigation systems and procedures
p0316 N78-210
Some practical limitations to fuel-conservative civil engine technology
[AAAF-NT-77-29] p0351 N78-22 092
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-2 5985

Aviation fuels beyond the 1980's --- liquefied gases and synthetic fuels
[NASA-TM-79510] p0442 N78-26223
Metal technology for future aircraft design
p0550 N78-30115
Future needs and opportunities in the air traffic control system
[GPO-98-931] p0559 N78-31076
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911
TECHNOLOGIES
NT ENERGY TECHNOLOGY
NT MARINE TECHNOLOGY
NT MILITARY TECHNOLOGY
Bibliography of Lewis Research Center technical contributions announced in 1976
[NASA-TM-73860] p0213 N78-17921
TECHNOLOGY ASSESSMENT
Aircraft use in weather modification
p0056 A78-14995
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
Moving V/STOL from technology to system
p0075 A78-16693
How good is jet lift VTOL technology
p0076 A78-16696
New generation of radio navigation equipment
p0115 A78-18665
The answer to the 'engine deficiency' question --- design cycles for gas turbine engines
p0126 A78-19546
The digital airplane --- military avionics
p0126 A78-19547
Core engine noise reduction - Definition and trends --- aircraft turboengine noise
[AIAA PAPER 77-1273] p0130 A78-19978
Toward scramjet aircraft --- progress in engine development
p0177 A78-23421
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 A78-24910
1977 report to the aerospace profession; Proceedings of the Twenty-first Symposium, Beverly Hills, Calif., October 12-15, 1977
p0232 A78-28451
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
Landing systems - The Navy viewpoint
p0281 A78-30097
The role of avionics in modern aircraft
p0328 A78-32651
Vibration in helicopters
p0331 A78-33444
Flight mechanics today and tomorrow - Balance and perspectives --- aircraft design, control and dynamics simulation
p0337 A78-34942
The quest for new technologies in the helicopter field
p0339 A78-35325
State-of-the-art of turbofan engine noise control
p0340 A78-35658
An economic and technical perspective of the turboprop engine in Ag-aviation
p0375 A78-37536
Current trends in the aerial application of fire retardants
p0425 A78-42512
Reduction of aircraft gas turbine engine pollutant emissions - A status report
p0480 A78-45429
A critical look at V/STOL technology
[AIAA PAPER 78-1526] p0481 A78-46502
Structural material trends in commercial aircraft
[AIAA PAPER 78-1552] p0482 A78-46515
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
Sensor technology for turbine engine monitoring systems
[AIAA PAPER 78-1474] p0513 A78-47920
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
Current and future navigation and landing systems
p0569 A78-50265
The Navy's approach /Air traffic control/
p0595 A78-52969
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
Special study: Emergency locator transmitters, an overview
[NTSB-AAS-78-1] p0314 N78-21063
Research requirements to improve reliability of civil helicopters
[NASA-CR-145335] p0316 N78-21093
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099
The future of wind tunnel technology in Germany
[NASA-TM-75244] p0364 N78-23106
Overview of powered-lift technology --- as used on the YC-14 aircraft and C-15 aircraft
p0389 N78-24047
AV-8B composite wing government/industry briefing
p0396 N78-24113
Progress on coal-derived fuels for aviation systems
[NASA-TM-78696] p0412 N78-25545
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118
Liquid-cooling technology for gas turbines review and status
[NASA-TM-78906] p0441 N78-26145
CTOL transport technology, 1978 --- conferences
[NASA-CP-2036-PT-1] p0446 N78-27046
Overview of NASA CTOL program
p0446 N78-27047
Status of advanced turboprop technology
p0447 N78-27055
Laminar flow control overview
p0448 N78-27066
An investigation of short haul air transportation in the southeastern United States
[NASA-CR-152166] p0451 N78-27094

Ceramic technology readiness program
[FE-2664-3] p0457 N78-27279
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
Technical evaluation of flying weapon systems
[RAE-LIB-TRANS-1948] p0560 N78-31087
The technology assessment of LTA aircraft systems --- hybrid airships for passenger and cargo transportation
[NASA-TM-75535] p0603 N78-32043
V/STOL aerodynamic technology assessment
[AD-A054797] p0607 N78-32069
Translations on USSR science and technology: Physical science and technology, no. 42
[JPRS-71612] p0621 N78-33015
Translations on USSR science and technology: Physical science and technology, no. 44
[JPRS-71659] p0621 N78-33024

TECHNOLOGY TRANSFER
NT AEROSPACE TECHNOLOGY TRANSFER
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
Remotely piloted aircraft in the civil environment
p0283 A78-30506
An overview of aerospace gas turbine technology of relevance to the development of the automotive gas turbine engine
[NASA-TM-73849] p0098 N78-13062
The problem of technology transfer: Real or imagined
[AD-A042961] p0213 N78-17943
Technical and financial fall-out on armed forces from commercial and export helicopter programmes
p0264 N78-19150
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337

TECHNOLOGY UTILIZATION
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Application of skin technology to turbine blades --- zero gravity manufacture
[AIAA PAPER 78-285] p0163 A78-20792
Future development of commercial aircraft: Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
Applications of new visualization techniques to on-board equipment
p0343 A78-35974
New technologies for aircraft structures
p0382 A78-38803
Lighter-than-air concepts and recent developments
p0386 A78-39395
Lasers in aviation --- Russian book on aerospace applications
p0474 A78-45067
The U.S. Navy bets on V/STOL --- technological integration for next generation aircraft design
p0525 A78-49550
The potential of advanced technology for aircraft structures /10th J. D. North Memorial Lecture/
p0570 A78-50400
Naval structural materials - Requirements, issues, and opportunities
p0583 A78-51149
Emissions reduction technology program
p0039 N78-11065
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045

TEETERING
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053

TELECOMMUNICATION
NT AIRCRAFT COMMUNICATION
NT COLOR TELEVISION
NT COMMUNICATION
NT DATA LINKS
NT DEFENSE COMMUNICATIONS SATELLITE SYSTEM
NT GROUND-AIR-GROUND COMMUNICATIONS
NT OPTICAL COMMUNICATION
NT PULSE COMMUNICATION
NT RADIO COMMUNICATION
NT RADIO RELAY SYSTEMS
NT RADIO TELEMETRY
NT SELECTIVE DISSEMINATION OF INFORMATION
NT SPACE COMMUNICATION
NT SPACECRAFT ANTENNAS
NT SPACECRAFT COMMUNICATION
NT TELEMETRY
NT TIME DIVISION MULTIPLE ACCESS
NT TRANSOCEANIC COMMUNICATION
NT VOICE COMMUNICATION
NT WIDEBAND COMMUNICATION
The MABOTS maritime satellite programme
p0227 A78-27049
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas --- ground based control
[AD-A053938] p0452 N78-27106
Earth-to-orbital station radio bridge
p0621 N78-33019
Description of a model for evaluating operational performance of communications system
[AD-A057199] p0632 N78-33313

TELEMETERS
U TELEMETRY

TELEMETRY
NT RADIO TELEMETRY
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489

TELEVISION CAMERAS
Guidance and control problems in semiautomatic recovery of the Aquila RPV
[AIAA 78-1272] p0540 A78-50182

TELEVISION EQUIPMENT
NT TELEVISION CAMERAS
Display augmentation in manual control of remotely piloted vehicles
p0231 A78-28148
Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945

TELEVISION RECEPTION
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles --- German thesis
p0592 A78-52498

TELEVISION SYSTEMS
NT COLOR TELEVISION
CRT update --- for airborne displays
p0374 A78-37490
Simultaneous sensor-presentation techniques study --- for attack aircraft
[AD-A043355] p0024 N78-10066
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073

TELEVISION TRANSMISSION
Airborne television transmission
p0477 A78-45218

TELLEGEN THEORY
U NETWORK SYNTHESIS

TEMPERATURE
NT AMBIENT TEMPERATURE
NT ATMOSPHERIC TEMPERATURE
NT FLASH POINT
NT GAS TEMPERATURE
NT HIGH TEMPERATURE
NT NOISE TEMPERATURE
NT OPERATING TEMPERATURE
NT SURFACE TEMPERATURE
NT TRANSITION TEMPERATURE
NT WALL TEMPERATURE

TEMPERATURE CONTROL
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
Some aspects of the thermal design of flight vehicles and processing of heat-test data
p0228 A78-27452

Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
TEMPERATURE DISTRIBUTION
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683
Economical method for calculating unsteady temperature fields in thin-walled aircraft structures
p0165 A78-20903
Steady-state bulk temperature field in cooled turbine blades
p0187 A78-24156
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
A computer-aided method of calculating temperature fields in turbine disks
p0581 A78-50796
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
Investigation on temperature distribution near film cooled airfoils
p0320 N78-21127
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
TEMPERATURE EFFECTS
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568
Mach number and temperature effects on jets
[AIAA PAPER 78-1152] p0476 A78-45134
Some effects of temperature on the erosion of metals
p0588 A78-51594
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
TEMPERATURE FIELDS
U TEMPERATURE DISTRIBUTION
TEMPERATURE INDICATORS
U INDICATING INSTRUMENTS
TEMPERATURE MEASUREMENT
A current weather information display system for use at airports
p0213 N78-17600
TEMPERATURE MEASURING INSTRUMENTS
NT PNEUMATIC PROBES
NT TEMPERATURE PROBES
TEMPERATURE PROBES
NT PNEUMATIC PROBES
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
TEMPERATURE PROFILES
Temperature profiles of rotating cooled blade --- via infrared photography of air-cooled turbine blades
p0573 A78-50581
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
TEMPERATURE SENSORS
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
TENSILE DEFORMATION
The damage sum in fatigue of structure components --- aircraft structures
[ICAF-1032] p0411 N78-25454
TENSILE STRENGTH
Quiet revolution - An update on carbon fibres for aircraft structures
p0070 A78-15952
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction --- fatigue life of aircraft construction materials
[BMVG-FBWT-77-23] p0555 N78-30603
TENSILE STRESS
Transmission of a concentrated force to a plate
p0129 A78-19726
Deployment forces in towing systems --- by aircraft
p0188 A78-24365
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
TENSILE TESTS
Experimental investigation of composite wing failure
[AIAA 78-509] p0279 A78-29809
TERCOM
A parametric analysis of TERCOM false fix probability --- TERrain COntour Matching
p0539 A78-49997
Terrain Contour Matching (TERCOM): Sensitivity to heading and ground-speed errors
[AD-A056127] p0609 N78-32084
TERMINAL CONFIGURED VEHICLE PROGRAM
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
Terminal-area flight experience with the NASA Terminal Configured Vehicle
p0291 A78-31972
CTOL concepts and technology development
p0461 A78-43358
Flight experiments to improve terminal area operations
[NASA-TM-78685] p0359 N78-23070
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
Flight experiments to improve terminal area operations
p0497 N78-29058
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074
TERMINAL FACILITIES
NT SHIP TERMINALS
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer --- Joint Tactical Information Distribution System for TDMA digital communication and navigation
[AIAA 77-1415] p0014 A78-12677
Lighting in airport terminals
p0072 A78-16279
A new approach to future airport planning
p0134 A78-20482
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
International trends in airport construction
p0328 A78-32814

SHF/EHF satellite communication terminal --- onboard C-135 aircraft
[AIAA 78-581] p0328 A78-32921
Terminal airspace/airport congestion delays
p0330 A78-33121
Nairobi's future has begun --- Kenya international airport facilities
p0339 A78-35275
Study on problems of terminal site location --- environmental effects on airport, harbor or truck depot
p0369 A78-36323
User delay cost model for a terminal control area
p0427 A78-43039
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
FAA facilities maintenance cost reduction model
p0428 A78-43043
Mitsubishi Passenger Transfer Vehicle Model 150
p0429 A78-43298
Computer simulation of terminal utilization --- for airport planning
p0469 A78-44225
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
Airports in the year 2000 - Suggestions for improving capacity
p0570 A78-50435
Toulouse combines elegance with economy --- French airport design
p0570 A78-50436
Improved passenger flow through simulation
p0570 A78-50437
ATC in the year 2000
p0596 A78-52978
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
Aviation weather service requirements, 1980 - 1990
p0267 N78-19713
Flight experiments to improve terminal area operations
[NASA-TM-78685] p0359 N78-23070
Flight experiments to improve terminal area operations
p0497 N78-29058

TERMINAL GUIDANCE
NT LASER GUIDANCE
Mission management in the airport vicinity --- digital flight control for terminal maneuvering area
[DGLR PAPER 77-037] p0190 A78-24427
Strategic positioning and traffic regulation in the terminal zone
p0217 A78-25150
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
System requirements for transition from enroute to approach guidance
p0370 A78-36453
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
Guidance and control design considerations for Low-Altitude and Terminal-Area Flight
[AGARD-CP-240] p0431 N78-26049
Proposal for a cost effective radar navigation system for low altitude and terminal area flight
p0431 N78-26057
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311

TERNARY ALLOYS
Reaction diffusion in the NiCrAl and CoCrAl systems
p0597 A78-53063

TERNARY SYSTEMS (DIGITAL)
U DIGITAL SYSTEMS

TERRAIN ANALYSIS
Pattern recognition as an aid to radar navigation
p0530 A78-49855

TERRAIN CONTOUR MATCHING NAVIGATION SYSTEM
U TERCOM

TERRAIN FOLLOWING AIRCRAFT
Helicopter TF radar Pavelow III
p0068 A78-15697
B-1 terrain following
p0125 A78-19447
B-1 terrain following development
p0233 A78-28456
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Limitations of the UTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
Design considerations for a ground avoidance monitor for fighter aircraft
p0432 N78-26058
Terrain following criteria: The need for a cannon measure
p0432 N78-26060
B-1 terrain-following development
p0432 N78-26061
The terrain following task for the advanced tactical fighter using discrete optimal control
[AD-A055196] p0565 N78-31121
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089

TEST BEDS
U TEST EQUIPMENT

TEST CHAMBERS
NT ANECHOIC CHAMBERS
Unique test capabilities of the Eglin AFB McKinley Climatic Laboratory
p0291 A78-32127
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816
Operational experience in the Langley expansion tube with various test gases --- for atmospheric entry simulation
[NASA-TM-78637] p0152 N78-15060

TEST EQUIPMENT
A note on adaptive-wall wind tunnels
p0002 A78-11634
Microprocessor controlled testing of Air Data Computers
p0065 A78-15649
Modeling of Air Data Computers in test system software
p0065 A78-15650
Effect of reliability programs on life cycle cost - A case history --- of TACAN test set
p0276 A78-29478
French procedures for airfield pavement load evaluation
p0526 A78-49679
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
Physical characteristics: Aviation materiel --- Army test facilities and equipment
[AD-A055803] p0610 N78-32093
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101

TEST FACILITIES
NT ANECHOIC CHAMBERS
NT BALLISTIC RANGES
NT BLOWDOWN WIND TUNNELS
NT CASCADE WIND TUNNELS
NT ENGINE TESTING LABORATORIES
NT HOTSHOT WIND TUNNELS
NT HYDRAULIC TEST TUNNELS
NT HYPERSONIC WIND TUNNELS
NT HYPERVELOCITY WIND TUNNELS
NT LOW SPEED WIND TUNNELS
NT ROCKET TEST FACILITIES
NT SHOCK TUNNELS
NT SLOTTED WIND TUNNELS
NT SUBSONIC WIND TUNNELS
NT SUPERSONIC WIND TUNNELS

NT TEST RANGES
NT TEST STANDS
NT TRANSONIC WIND TUNNELS
NT WIND TUNNELS
Energy conservation in aeronautical ground testing
p0002 A78-11103
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
Getting ready for V/STOL T&E in the 80's --- Test and Evaluation for subsonic and supersonic options
p0123 A78-19431
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
Test instrumentation system for flight simulator handling characteristics
[AIAA 78-1595] p0579 A78-50669
The determination of some requirements for a helicopter flight research simulation facility
[NASA-CR-152066] p0030 N78-10117
High velocity jet noise source location and reduction. Task 1 supplement: Certification of the General Electric jet noise anechoic test facility
[AD-A042327/7] p0031 N78-10119
Design, construction and testing of a sub-scale turbojet test cell
[AD-A043005] p0044 N78-11126
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
Numerical aerodynamic simulation facility. Preliminary study extension. Executive summary
[NASA-CR-152106] p0252 N78-19050
Numerical aerodynamic simulation facility. Preliminary study extension
[NASA-CR-152107] p0252 N78-19051
Hypersonic heat transfer test program in the VKI longshot facility --- ogive body configuration
[AD-A050295] p0302 N78-20086
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
A sub-scale turbojet test cell for design evaluations and analytical model validation
[AD-A049862] p0324 N78-21166
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
Safe air-space requirements above an explosive-ordnance test facility
[MRL-R-711] p0451 N78-27092
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
Physical characteristics: Aviation materiel --- Army test facilities and equipment
[AD-A055803] p0610 N78-32093
TEST FIRING
NT STATIC FIRING
TEST PILOTS
Test pilot report on the angle rate bombing system
p0055 A78-14946
Helicopter flight demonstration
p0380 A78-38750
TEST RANGES
NT BALLISTIC RANGES
Some applications of a test track for aerodynamic testing
[AIAA PAPER 78-167] p0160 A78-20719
TEST STANDS
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand
p0333 A78-34161
Data acquisition in the case of a jet-engine test stand
p0335 A78-34488
Use of a field bench for testing turbojet engines
p0527 A78-49731
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
Combustor design and operation for a sub-scale turbojet test cell
[AD-A053791] p0455 N78-27134
TEST VEHICLES
NT FLIGHT TEST VEHICLES
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
TESTERS
U TEST EQUIPMENT
TESTING MACHINES
U TEST EQUIPMENT
TETHERED BALLOONS
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091
TETHERING
Aerospatiale is ready to develop a convertiplane with tethering rotors
[NASA-TM-75038] p0206 N78-17042
TETROONS
U SUPERPRESSURE BALLOONS
TEXTILES
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
TF-30 ENGINE
High frequency dynamic engine simulation --- TF-30 engine
[NASA-CR-135313] p0097 N78-13059
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
TF-41 ENGINE
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
TFX AIRCRAFT
U F-111 AIRCRAFT
THAWING
U MELTING
THEOREMS
NT BAYES THEOREM
NT BERNOULLI THEOREM
NT SIMILARITY THEOREM
NT UNIQUENESS THEOREM
THEORETICAL PHYSICS
NT NEWTON THEORY
THERMAL BOUNDARY LAYER
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
THERMAL CONDUCTIVITY
All-Union Seminar on Inverse and Conjugate Problems of Heat Transfer, 2nd, Moscow, USSR, October 19-21, 1976, Proceedings
p0228 A78-27451
Exploratory development of conductive coating materials --- for use on aircraft radomes
[AD-A048253] p0247 N78-18138
THERMAL CONTROL COATINGS
Thermal flux protection for aircraft
p0072 A78-16267
An analytical study of thermal barrier coated first stage blades in a JT9D engine
[NASA-CR-135360] p0198 N78-16054
Analytical study of thermal barrier coated first-stage blades in an F100 engine
[NASA-CR-135359] p0208 N78-17058

A computer program for full-coverage film-cooled blading analysis including the effects of a thermal barrier coating
[NASA-TM-78951] p0454 N78-27126
THERMAL CONVECTION
U FREE CONVECTION
THERMAL CURRENTS
U CONVECTIVE FLOW
THERMAL CYCLING TESTS
Investigation of turbine blade endurance during thermal cycling and vibration in a gas stream
p0001 A78-10267
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
Aspects of the thermal fatigue strength of gas-turbine engine components
p0523 A78-49176
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119
THERMAL EFFECTS
U TEMPERATURE EFFECTS
THERMAL EFFICIENCY
U THERMODYNAMIC EFFICIENCY
THERMAL EXPANSION
Transient expansion of the components of an air seal on a gas turbine disc
[SAE PAPER 770974] p0179 A78-23818
THERMAL INSULATION
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
THERMAL MAPPING
Automatic low frequency gain limiting for A-C coupled signal processing systems --- thermal imaging
p0054 A78-14938
THERMAL POWER
U TURBOGENERATORS
THERMAL PROPERTIES
U THERMODYNAMIC PROPERTIES
THERMAL PROTECTION
Thermal flux protection for aircraft
p0072 A78-16267
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
Protection of cooled blades of complex internal structure
[NASA-TM-75217] p0087 N78-12086
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
THERMAL RESISTANCE
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
THERMAL SHIELDING
U HEAT SHIELDING
THERMAL SHOCK
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28484
THERMAL SIMULATION
Some aspects of the thermal design of flight vehicles and processing of heat-test data
p0228 A78-27452
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
THERMAL STABILITY
Investigation of high-temperature properties of aircraft oils
p0374 A78-34322
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025
Aluminous keatite - A durable ceramic material for rotary regenerator cores --- for automotive gas turbine engines
p0574 A78-50588
THERMAL STRESSES
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
The development of a regenerator seal for vehicular use --- for automatic gas turbine engines
p0574 A78-50587
Investigation of the heat regime of gas turbine engine bearings --- Russian book
p0598 A78-53431
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
Turbine tip-clearance measurement
[AD-A052042] p0362 N78-23097
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057
THERMOCHEMICAL PROPERTIES
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0576 A78-49693
THERMOCHEMISTRY
NT AEROTHERMOCHEMISTRY
THERMODYNAMIC CYCLES
NT BRAYTON CYCLE
Mathematical model of the combustion-chamber filling process in a pulsating jet engine
p0131 A78-20253
Impact of engine cycle parameters on V/STOL Type A configuration and commonality
[SAE PAPER 770980] p0179 A78-23821
Choice of cycle for a regenerative bypass turbojet for long-range aircraft
p0527 A78-49723
Use of a field bench for testing turbojet engines
p0527 A78-49731
THERMODYNAMIC EFFICIENCY
Near-hole region heat transfer in full-coverage film cooling --- for high temperature gas turbines
p0573 A78-50579
Thermodynamical performances of closed-cycled gas-turbine
p0575 A78-50605
THERMODYNAMIC EQUILIBRIUM
Problems concerning high temperatures in small turbomachines
p0319 N78-21121
THERMODYNAMIC PROPERTIES
NT ENTHALPY
NT ENTROPY
NT SPECIFIC HEAT
NT SUPERCRITICAL PRESSURES
NT THERMAL CONDUCTIVITY
NT THERMAL EXPANSION
NT THERMAL STABILITY
NT THERMOCHEMICAL PROPERTIES
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
Minimisation of relaxation drag
p0374 A78-37423
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594

Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle engines
p0599 A78-53511
Characteristics and combustion of future hydrocarbon fuels --- aircraft fuels
[NASA-TM-78865] p0401 N78-24370
THERMODYNAMICS
NT AEROTHERMODYNAMICS
NT COMBUSTION PHYSICS
THERMOELASTICITY
NT AEROTHERMOELASTICITY
THERMOELECTRIC COOLING
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
Performance evaluation of thin layer thermoelectric device
[AD-A045361] p0103 N78-13918
THERMOGRAMS
U RECORDING INSTRUMENTS
THERMOMECHANICAL TREATMENT
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
THERMOMETRY
U TEMPERATURE MEASUREMENT
THERMONUCLEAR EXPLOSIONS
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
THERMONUCLEAR PROPULSION
U NUCLEAR PROPULSION
THERMOPHYSICAL PROPERTIES
NT SPECIFIC HEAT
NT SUPERCRITICAL PRESSURES
NT THERMAL CONDUCTIVITY
NT THERMAL STABILITY
THERMOPLASTIC RESINS
The relative fire resistance of select thermoplastic materials --- for aircraft interiors
p0480 A78-45475
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0526 A78-49693
Development of thermoplastic composite aircraft structural elements
[AD-A048468] p0258 N78-19097
THERMOSETTING RESINS
NT EPOXY RESINS
THERMOSTABILITY
U THERMAL STABILITY
THERMOTROPISM
U TEMPERATURE EFFECTS
THICK FILMS
Interaction of thick film dielectric, conductor, and alumina substrate for DCU201 aircraft controller
[SAND-78-0069] p0493 N78-28349
THICKNESS
Improved methods for calculating the thickness noise
p0620 N78-32832
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
THICKNESS RATIO
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
Design of a transonically profiled wing
[NASA-TM-75440] p0604 N78-32052
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
THIN AIRFOILS
NT INFINITE SPAN WINGS
NT THIN WINGS
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
High-frequency approximation for a nonlifting thin airfoil in subsonic flow
[AIAA PAPER 78-226] p0161 A78-20755
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
Aerodynamics of the annular wing
p0379 A78-38475
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
Unsteady incompressible flow past thin porous airfoils
p0427 A78-42918
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
THIN BODIES
Calculation of the induction of wind tunnels
p0132 A78-20277
Mathematical model of vortex-excited oscillations of thin, weakly damped structures
p0583 A78-51153
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443
THIN FILMS
Performance evaluation of thin layer thermoelectric device
[AD-A045361] p0103 N78-13918
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
THIN WALLED SHELLS
On the design of aerospace shell structures
p0075 A78-16600
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
Economical method for calculating unsteady temperature fields in thin-walled aircraft structures
p0165 A78-20903

THIN WALLS
Design of load-bearing structures of maximal rigidity
p0129 A78-19707
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
THIN WINGS
NT INFINITE SPAN WINGS
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
Use of the vorticity method in computing the aerodynamic characteristics of a thin wing in a steady supersonic flow
p0126 A78-19626
The computation of self-similar three-dimensional separated flows
p0127 A78-19657
Uniqueness theorem for an integral equation of a rectangular thin-section wing
p0130 A78-20201
Asymptotic theory of a wing moving at small distances from a solid wall
p0133 A78-20462
Three-dimensional hypersonic gas flow past a thin wing
p0163 A78-20795
Inviscid supersonic flow about a thin rectangular plate
p0165 A78-20906
Supersonic flow near a thin trapezoidal wing
p0166 A78-20921
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Calculation of supersonic flows past wings with allowance for trailing tangential discontinuities within the framework of a model employing a system of Euler equations
p0274 A78-28958
Three-dimensional flow of hypersonic gas past a thin airfoil
p0281 A78-30002
A flutter analysis of a system of two airfoils with aerodynamic interference
p0338 A78-34968
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
Asymptotic theory of a wing moving near a solid wall
p0518 A78-48248
Unsteady hypersonic gas flow past a thin wing of finite span
p0529 A78-49792
Movement of a tilted wing near a screen
[AD-A045920] p0144 N78-14347
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
Supersonic flow-around of thin bodies with Mach number close to unity
[AD-A051884] p0358 N78-23059
Aerodynamic characteristics of a jet sheet vortex generator --- wind tunnel tests using thin, low aspect ratio wings
[NASA-CR-158904] p0487 N78-28054
The lifting wing with minimum drag in supersonic flow
[VTH-LR-234] p0488 N78-28065
THINNERS
U SOLVENTS
THREE AXIS STABILIZATION
Influence of constrained arrestors on the operation of gyroscopic stabilizers
p0585 A78-51355
THREE DIMENSIONAL BOUNDARY LAYER
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
Three-dimensional boundary layer theory using shell geometrical concepts
p0584 A78-51176
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer exemplified with a transonic wing
[BMVG-PBWT-77-7] p0237 N78-18010
THREE DIMENSIONAL FLOW
NT SECONDARY FLOW
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
Three-dimensional transonic shear flow in a channel
p0010 A78-12290
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
Finite-difference calculations of three-dimensional transonic flow through a compressor blade row, using the small-disturbance nonlinear potential equations
p0011 A78-12298
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
Displacement thickness distributions in transonic flows about 3-D wings
p0108 A78-17612
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
The computation of self-similar three-dimensional separated flows
p0127 A78-19657
Solution of the problem of three-dimensional flow past a delta wing with subsonic edges by a modification of the Lax-Wendroff method
p0128 A78-19696
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Three-dimensional hypersonic gas flow past a thin wing
p0163 A78-20795
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies
p0186 A78-24096
Some singular aspects of three-dimensional transonic flow
p0223 A78-26234
Three-dimensional flow of hypersonic gas past a thin airfoil
p0281 A78-30002
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
Application of the integral-transformation method to three-dimensional unsteady problems of the theory of cascades
p0370 A78-36366
Finite-element analysis of three-dimensional potential flow in turbomachines
p0416 A78-40831

Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503
Contribution to the theory of three-dimensional hypersonic viscous gas flow past blunted bodies in the presence of injection
p0580 A78-50757
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025
A computational model for three-dimensional incompressible small cross flow wall jets
[AD-A048450] p0237 N78-18008
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
Boundary layer over spinning blunt-body of revolution at incidence including magnus forces
[AD-A049199] p0255 N78-19072
A three-dimensional potential-flow program with a geometry package for input data generation
[NASA-CR-145311] p0312 N78-21047
Unsteady aerodynamics --- conference emphasizing numerical analysis of three dimensional flows
[AGARD-CP-227] p0345 N78-22033
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081
Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
Phenomenological aspects of quasi-stationary controlled and uncontrolled three-dimensional flow separations --- in relation to aircraft design considerations and swept wings
p0493 N78-28402
Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
Structure of turbulence in complex flows --- effects of unsteadiness and three dimensionality
p0494 N78-28407
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041

THREE DIMENSIONAL MOTION
NT SECONDARY FLOW
NT THREE DIMENSIONAL FLOW
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563

THROATS
Velocity profiles in the Laval nozzle throat for uniform compressible swirling flow
p0165 A78-20905
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142

THROTTLING
Analytic construction of part-throttle GTE characteristics
p0049 A78-13170
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
Turboexpanders for energy conservation
p0588 A78-51621
A new technique for controlling the exit flow periodicity of supersonic cascades --- throttling with slotted tailboard
p0045 N78-11330
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123

THRUST
NT JET THRUST
NT STATIC THRUST
NT VARIABLE THRUST
Thrust-augmented vortex attenuation
p0080 N78-12024
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration --- in the Langley V/STOL tunnel
[NASA-TP-1090] p0092 N78-13014
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives --- light aircraft Sportavia S5
[BMVG-FBWT-77-16] p0245 N78-18072

THRUST AUGMENTATION
Application of the thrust augmentation wing principle for potential military use
p0110 A78-17893
The prediction of the performance of low pressure-ratio thrust-augmenter ejectors
[AIAA PAPER 78-145] p0159 A78-20704
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor --- in aircraft design
p0481 A78-46354
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
Design and verification of a turbofan Swirl augmentor
p0572 A78-50564
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
Evaluation of a power-augmented-ram wing operating free in heave and pitch over water
[AD-A045428] p0093 N78-13021
An investigation of corner separation within a thrust augmenter having Coanda jets
[AD-A052131] p0366 N78-23392

THRUST BEARINGS
Self-acting shaft seals
p0331 A78-33219

THRUST CONTROL
NT THRUST VECTOR CONTROL
A singular perturbation analysis of optimal aerodynamic and thrust magnitude control
p0183 A78-23900
Analysis of optimal turning maneuvers in the vertical plane --- for high thrust aircraft
[AIAA 78-1333] p0482 A78-46531

THRUST MEASUREMENT
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410

Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
THRUST POWER
U THRUST
THRUST REVERSAL
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071
THRUST VECTOR CONTROL
Thrust characteristics of thrust vector control systems with blowing injection of chemically nonreactive gases
p0187 A78-24254
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
The effect of thrust vectoring and attitude control concepts on the propulsion system of V/STOL aircraft
[AIAA PAPER 78-1020] p0520 A78-48481
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496
An investigation on thrust vector control --- using a pneumatic technique
[DLR-IB-151-76/15] p0043 N78-11118
Optimal guidance and control for investigating aircraft noise-impact reduction
[NASA-TP-1237] p0363 N78-23100
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
The design and simulation of a takeoff stabilization system for an aircraft with an air cushion landing system
[AD-A053220] p0440 N78-26137
Aerodynamic characteristics induced on a supercritical wing due to vectoring twin nozzles at Mach numbers from 0.40 to 0.95
[NASA-TM-78746] p0543 N78-30039
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
THRUST-WEIGHT RATIO
The impact of contingency power concepts on V/STOL aircraft take-off-gross-weight
[AIAA PAPER 78-926] p0519 A78-48451
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
THRUSTORS
U ROCKET ENGINES
THUNDERSTORMS
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655
TIG WELDING
U GAS TUNGSTEN ARC WELDING
TILT
U ATTITUDE (INCLINATION)
TILT ROTOR AIRCRAFT
NT XV-15 AIRCRAFT
Tilt-proprotor perspective --- VTOL aircraft characteristics and development
p0075 A78-16694
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
The promise of tilt rotor
p0508 A78-47266
Approach guidance logic for a tilt-rotor aircraft
[AIAA 78-1295] p0542 A78-50202
Pilot evaluation of an advanced hingeless rotor XV-15 simulation
[NASA-CR-152034] p0022 N78-10046
Aerodynamic interference effects on tilting proprotor aircraft --- using the Green function method
[NASA-CR-152053] p0092 N78-13007
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110
TILT ROTOR RESEARCH AIRCRAFT PROGRAM
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
TILTING
U ATTITUDE (INCLINATION)
TILTING ROTORS
Aerodynamic interference effects on tilting proprotor aircraft --- using the Green function method
[NASA-CR-152053] p0092 N78-13007
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
TIME
NT FLIGHT TIME
NT MTBF
NT REACTION TIME
TIME DELAY
U TIME LAG
TIME DEPENDENCE
Comparison of a finite difference method with a time-marching method for blade to blade transonic flow calculations
p0011 A78-12295
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
Time-dependent fire behavior of aircraft cabin materials
[AD-A050923] p0324 N78-21234
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074
TIME DIVISION MULTIPLE ACCESS
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer --- Joint Tactical Information Distribution System for TDMA digital communication and navigation
[AIAA 77-1415] p0014 A78-12677
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
TIME FUNCTIONS
A new formulation for the epsilon method applied to the minimum-time-to-climb problem
p0357 N78-23028
TIME LAG
Transient speed response of a gas turbine
p0122 A78-19229
Time delay measurements for flight simulators
p0381 A78-38788
User delay cost model for a terminal control area
p0427 A78-43039
Airport improvement task force delay study: Delay model validation plan
[AD-A048112] p0211 N78-17077

Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
Parameters of future ATC systems relating to airport capacity/delay
[AD-A057059] p0624 N78-33068
TIME MEASUREMENT
Time delay measurements for flight simulators
p0381 A78-38788
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
Accurate timing in landings through air traffic control
p0433 N78-26067
TIME MEASURING INSTRUMENTS
NT ATOMIC CLOCKS
TIME OPTIMAL CONTROL
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
A singular perturbation analysis of optimal aerodynamic and thrust magnitude control
p0183 A78-23900
Minimum-time loop maneuvers of jet aircraft
p0473 A78-44830
Analysis of optimal turning maneuvers in the vertical plane --- for high thrust aircraft
[AIAA 78-1333] p0482 A78-46531
TIME RESPONSE
Flow starting times in constant-area supersonic diffusers
p0076 A78-16810
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Precision DME for new landing system - Fast or slow pulse
p0225 A78-26549
Aircraft model prototypes which have specified handling-quality time histories
[NASA-CR-143848] p0142 N78-14054
TIME SERIES ANALYSIS
A method for validating missile system simulation models
[AD-A055689] p0613 N78-32169
TIME SHARING
Air-to-air designate/track with time sharing
p0538 A78-49977
TIMING
U TIME MEASUREMENT
TIMOSHENKO BEAMS
Dynamic coefficient of an elastically supported, pre-stressed beam --- in air craft structures
p0424 A78-42100
TIP DRIVEN ROTORS
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
TIP SPEED
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109
TIPS
NT BLADE TIPS
NT WING TIPS
Turbine tip-clearance measurement
[AD-A052042] p0362 N78-23097
TIRES
NT AIRCRAFT TIRES
TITANIUM
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys
p0427 A78-43015
Diffusion brazing titanium sandwich structures
p0587 A78-51524
Real-time testing of titanium sheet and extrusion coupon specimens subjected to Mach 2.7 supersonic cruise aircraft wing stresses and temperatures
[NASA-CR-2754] p0101 N78-13478
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
Preliminary design of low-cost titanium structure --- B-1 aircraft engine nacelles
[AD-A053327] p0408 N78-25087
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
TITANIUM ALLOYS
Manufacture of titanium components by hot isostatic pressing
p0013 A78-12456
Role of titanium in aerospace applications
p0123 A78-19402
Coatings for fretting prevention
p0178 A78-23441
Assessment of processing methods for titanium alloys for aircraft structures
p0221 A78-26040
Alloy needs and design - The airframe
p0285 A78-30856
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
Titanium and titanium alloys in aircraft maintenance and repair. I
p0378 A78-38246
Fatigue crack propagation of titanium alloys under dwell-time conditions
p0387 A78-39596
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys
p0427 A78-43015
Titanium and titanium alloys for the maintenance and repair of aircraft. II
p0469 A78-44200
Fatigue crack growth of titanium fan blades
p0589 A78-51744
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324
Correlation of microstructure with fracture toughness properties in metals, part 3 --- titanium alloys
[AD-A043741] p0045 N78-11238
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
Electron beam welding titanium elements of an aircraft structure
[AAAF-NT-77-44] p0355 N78-22383
Titanium damage tolerant design data for propulsion systems --- gas turbine engine components
[AD-A053252] p0442 N78-26202
Metal technology for future aircraft design
p0550 N78-30115
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235
TOKAMAK DEVICES
Ballooning stability boundaries for the large-aspect-ratio tokamak
p0599 A78-53664
TOLERANCES (MECHANICS)
NT IMPACT TOLERANCES
Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
Analysis of GTE tolerance monitoring parameter formation --- gas turbine engine
p0517 A78-48212

TOLERANCES (PHYSIOLOGY)
NT HUMAN TOLERANCES
TONOMETRY
U PRESSURE MEASUREMENTS
TOOLS
NT MACHINE TOOLS
NT WRENCHES
Stator rotor tools
[NASA-CASE-MSC-16000-1] p0402 N78-24544
TOPOGRAPHY
Method of calculating the landmark density of aeronautical charts
p0475 A78-45124
TOPOLOGY
NT IMBEDDINGS (MATHEMATICS)
TORNADO AIRCRAFT
U MRCA AIRCRAFT
TOROIDAL WHEELS
Aircraft takeoff from dirt airstrips
p0293 A78-32273
TORQUE
Rolling tail design and behavior as affected by actuator hinge moment limits --- for B-1 maneuverability
[AIAA PAPER 78-1500] p0515 A78-47940
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
Control-surface hinge-moment calculations for a high-aspect-ratio supercritical wing
[NASA-TM-78664] p0557 N78-31043
Antitorque training: Evaluation of effectiveness in reducing mishap losses
[AD-A055040] p0561 N78-31092
TORSION
Investigation of the compliant rotor concept
[AD-A042338] p0022 N78-10051
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
TORSIONAL VIBRATION
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
TOWED BODIES
Approximate wind-tunnel simulation of the dynamics of a system composed of a body with a trailing cable
p0165 A78-20902
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
TOWED TARGETS
U TOWED BODIES
TOWERS
NT AIRPORT TOWERS
TOWING
Deployment forces in towing systems --- by aircraft
p0188 A78-24365
TOWNSEND DISCHARGE
NT GAS DISCHARGES
TOXIC HAZARDS
ALC/50/ values for some polymeric materials --- Apparent Lethal Concentration fire toxicity
p0371 A78-36596
The relative fire resistance of select thermoplastic materials --- for aircraft interiors
p0480 A78-45475
TOXICITY
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046
TOXICITY AND SAFETY HAZARD
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
TRACKING (POSITION)
NT OPTICAL TRACKING
NT PURSUIT TRACKING
NT RADAR TRACKING
NT RADIO TRACKING
NT RANGE AND RANGE RATE TRACKING
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
Base motion sensitivity analysis for airborne ILIC pointing and tracking systems --- In-Loop Integration Control
p0063 A78-15593
Determination of flight-tracking controllers using Solheim's pole-shifting method --- for HFB-320 airbus
p0074 A78-16415
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
Digital area correlation tracker
p0536 A78-49951
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
TRACKING ANTENNAS
U DIRECTIONAL ANTENNAS
TRACKING FILTERS
A performance analysis of a radar tracking filter --- digital Kalman filter for aircraft targets
p0107 A78-17564
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
TRACKING NETWORKS
NT GLOBAL TRACKING NETWORK
Modular target acquisition and designation systems
p0536 A78-49954
TRACKING RADAR
Aircraft tracking problems from range rate 'turbine modulation'
p0063 A78-15631
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
Multipath limitations on low-angle radar tracking
p0222 A78-26157
TRACKING STATIONS
NT GLOBAL TRACKING NETWORK
TRACKING STUDIES
U TRACKING (POSITION)
TRACTS
U SITES
TRADEOFFS
YAH-64 advanced attack helicopter design tradeoffs
[SAE PAPER 770950] p0178 A78-23801
Aircraft engine design and development through lessons learned
p0419 A78-41507
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125
Multiprocessing tradeoffs and the wind-tunnel simulation problem
p0270 N78-19805
TRAFFIC
NT AIR TRAFFIC
TRAFFIC CONTROL
NT AIR TRAFFIC CONTROL
NT RADAR APPROACH CONTROL
Access study and simulation of the Marots communication system
p0226 A78-27027
A tandem-queue algorithm for evaluating overall airport capacity
p0202 N78-16741
TRAILERS
An investigation of drag reduction for tractor trailer vehicles
[NASA-CR-144877] p0633 N78-33444

TRAILING EDGES
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
An analysis method for the viscous flow over circulation-controlled airfoils
[AIAA PAPER 78-157] p0160 A78-20710
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Uniformly precise conformal mapping of the exterior of a circle onto the exterior of a wing section
p0174 A78-22642
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
An analysis of the aircraft trailing vortex system
[AIAA PAPER 78-312] p0185 A78-24013
Calculation of supersonic flows past wings with allowance for trailing tangential discontinuities within the framework of a model employing a system of Euler equations
p0274 A78-28958
Trailing vortices. II
p0507 A78-47172
Uniformly exact conformal transformation of exterior of circle onto exterior of wing profile
p0518 A78-48224
Vortex dynamics
p0582 A78-51051
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data
p0322 N78-21148
Determination of the vortex shedding frequency of cascade with different trailing edge thickness
p0347 N78-22067
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
Wind-tunnel investigation of effects of trailing-edge geometry on a NASA supercritical airfoil section
[NASA-TM-X-2336] p0450 N78-27079
Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
TRAILING-EDGE FLAPS
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Fatigue strength of the upper guide rail of the A-300 no. 4 landing flap support (tests, results, and evaluation)
[DLR-IB-152-77/09] p0038 N78-11057
Analytical study of a free-wing/free-trimmer concept --- for gust alleviation and high lift
[NASA-CR-2946] p0236 N78-18000
TRAINERS
U TRAINING DEVICES
TRAINING
U EDUCATION
TRAINING AIRCRAFT
NT ALPHA JET AIRCRAFT
NT JAGUAR AIRCRAFT
NT T-37 AIRCRAFT
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
Effect of performance objectives on the design and cost of future USAF pilot training aircraft
[AIAA PAPER 78-1498] p0515 A78-47938
Evaluation of slimpack style parachute in CT4A airtrainer aircraft
[AD-A047083] p0195 N78-16024
TRAINING DEVICES
Correlated data bases for the present and future --- aircrew training simulator acquisitions flexibility
[AIAA 78-1583] p0579 A78-50662
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
Feasibility study for simulation of an airport tower control environment
[AD-A051174] p0400 N78-24154
TRAINING SIMULATORS
NT COCKPIT SIMULATORS
NT FLIGHT SIMULATORS
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
Simulation in the development of the training and ground-attack aircraft Alpha Jet
p0289 A78-31943
The impact of flight simulators on U.S. airlines
p0382 A78-38798
Air-to-air combat simulation
p0510 A78-47868
A flight simulation high order language study
p0536 A78-49957
COMPUTROL - A new technique in image generation --- advanced computerized visual environment simulator
[AIAA 78-1579] p0579 A78-50660
Optical simulator with a holographic component --- infinity display system
[AIAA 78-1581] p0579 A78-50671
TRAJECTORIES
NT ASCENT TRAJECTORIES
NT BALLISTIC TRAJECTORIES
NT DESCENT TRAJECTORIES
NT PARTICLE TRAJECTORIES
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041
A design of trajectory estimator using multiple DME range measurements
[AD-A055191] p0560 N78-31077
Trajectory optimization for some sailplane performance problems
p0560 N78-31083
TRAJECTORY ANALYSIS
Gas path analysis applied to pre and post overhaul testing of JT9D turbofan engine
[SAE PAPER 770993] p0180 A78-23829
A relative motion analysis of horizontal collision avoidance
p0387 A78-39674
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133
TRAJECTORY CONTROL
NT TRAJECTORY OPTIMIZATION
Integrated flight trajectory control
p0061 A78-15563
Software structured weapon delivery
p0532 A78-49875
TRAJECTORY MEASUREMENT
Methodology questions involved in systems engineering for devising an optimum radio-engineering system for trajectory measurements --- of space vehicles
p0598 A78-53253
TRAJECTORY OPTIMIZATION
More about flight-path-angle transitions in optimal airplane climbs
p0291 A78-32098
Mutual counteraction of two moving objects. I --- remote optimal encounter guidance
p0338 A78-34960
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059

Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072
TRANSCEIVERS
U TRANSMITTER RECEIVERS
TRANSDUCERS
NT DIGITAL TRANSDUCERS
NT MICROPHONES
NT PIEZOELECTRIC TRANSDUCERS
NT PRESSURE SENSORS
NT SOUND TRANSDUCERS
TRANSFER FUNCTIONS
Using simulation to determine the transfer function of the electronic part of a control loop --- for gas turbine aircraft engines
p0277 A78-29584
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459
An approach to the determination of aircraft handling qualities using pilot transfer functions
p0356 N78-23018
TRANSFORM INTEGRALS
U INTEGRAL TRANSFORMATIONS
TRANSFORMATIONS (MATHEMATICS)
NT FAST FOURIER TRANSFORMATIONS
NT INTEGRAL TRANSFORMATIONS
TRANSFORMERS
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
TRANSIENT HEATING
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
TRANSIENT LOADS
NT BLAST LOADS
NT GUST LOADS
NT LANDING LOADS
NT SHOCK LOADS
TRANSIENT PRESSURES
Compressibility effects on parachute transient pressures
p0591 A78-51950
TRANSIENT RESPONSE
Transient speed response of a gas turbine
p0122 A78-19229
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
A three-dimensional finite-difference solution of the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
Investigation of a discrete C-Star transient response controller for the YF-16 at a selected flight condition
[AD-A053441] p0456 N78-27139
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
A study of the effect of the rotor coil couplings of a synchronous machine on its predicted transient response
p0632 N78-33330
TRANSIENTS (SURGES)
U SURGES
TRANSISTOR CIRCUITS
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
TRANSIT SATELLITES
Positioning and navigation by satellite --- for marine operations
[AIAA 77-1553] p0051 A78-13684
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
TRANSITION
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345
TRANSITION FLOW
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
TRANSITION METALS
NT CHROMIUM
NT TANTALUM
NT TITANIUM
NT ZIRCONIUM 95
Application of rare earth/transition metal permanent magnets to 400 Hz aircraft systems - An AF overview
p0535 A78-49935
TRANSITION TEMPERATURE
Increasing the resources of jet fuels
p0003 A78-11699
TRANSLATIONAL MOTION
NT SECONDARY FLOW
NT THREE DIMENSIONAL FLOW
NT THREE DIMENSIONAL MOTION
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
The force on a small sphere in slow viscous flow
p0591 A78-52175
The dynamics of non spherical particles --- aerodynamic translational mobility of cubes and cylinders
[AD-A047144] p0256 N78-19080
TRANSMISSION
NT ACOUSTIC PROPAGATION
NT AERODYNAMIC HEAT TRANSFER
NT CONDUCTIVE HEAT TRANSFER
NT CONVECTIVE HEAT TRANSFER
NT DATA TRANSMISSION
NT FREQUENCY DIVISION MULTIPLEXING
NT HEAT TRANSFER
NT HYPERSONIC HEAT TRANSFER
NT IONOSPHERIC PROPAGATION
NT LIGHT TRANSMISSION
NT MICROWAVE ATTENUATION
NT MICROWAVE TRANSMISSION
NT MULTIPATH TRANSMISSION
NT MULTIPLEXING
NT RADAR TRANSMISSION
NT RADIATIVE HEAT TRANSFER
NT RADIO TRANSMISSION
NT SATELLITE TRANSMISSION
NT SHOCK WAVE PROPAGATION
NT SIGNAL TRANSMISSION
NT SOUND TRANSMISSION
NT SPREAD SPECTRUM TRANSMISSION
NT SUPERSONIC HEAT TRANSFER
NT TELEVISION TRANSMISSION
NT TURBULENT HEAT TRANSFER
NT WAVE PROPAGATION
TRANSMISSION EFFICIENCY
High performance antenna assembly --- for aircraft communication with satellite
p0062 A78-15588
Digital avionic communication --- computer system design to improve interequipment transmission
p0068 A78-15694
Space optical communications with the Nd:YAG laser
p0285 A78-30886
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038
TRANSMISSION LINES
NT COMMUNICATION CABLES
NT MICROSTRIP TRANSMISSION LINES

NT OPTICAL WAVEGUIDES
NT POWER LINES
NT WAVEGUIDES
TRANSMISSION LOSS
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
TRANSMISSIONS (MACHINE ELEMENTS)
A new chip detector --- component failure detection in aircraft and helicopter propulsion and transmission systems
p0058 A78-15158
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
Feasibility study of negative lift circumferential type seal for helicopter transmissions
[NASA-CR-135302] p0212 N78-17390
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
Engineering services to conduct qualification testing of precision forged spiral bevel gears
[AD-A051542] p0366 N78-23438
Finite element analysis for complex structures, helicopter transmission housing structural modeling
[AD-A052759] p0397 N78-24126
Advanced overrunning clutch technology --- for use in helicopters
[AD-A052635] p0403 N78-24557
HLH drive system
[AD-A054024] p0500 N78-29094
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
TRANSMITTER RECEIVERS
Filtering techniques in avionic transmitters
p0384 A78-39084
TRANSMITTERS
NT OMNIDIRECTIONAL RADIO RANGES
NT RADAR TRANSMITTERS
NT RADIO BEACONS
NT RADIO TRANSMITTERS
NT TRANSMITTER RECEIVERS
TRANSOCEANIC COMMUNICATION
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
TRANSOCEANIC SYSTEMS
NT TRANSOCEANIC COMMUNICATION
The next generation of commercial aircraft - International perspective
p0057 A78-15087
TRANSONIC AIRCRAFT
U SUPERSONIC AIRCRAFT
TRANSONIC AIRCRAFT TECHNOLOGY PROGRAM
U TACT PROGRAM
TRANSONIC COMPRESSORS
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
Performance with and without inlet radial distortion of a transonic fan stage designed for reduced loading in the tip region
[NASA-TP-1294] p0545 N78-30057
TRANSONIC FLIGHT
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
Design of a transonically profiled wing
[DGLR PAPER 77-026] p0189 A78-24417
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
TRANSONIC FLOW
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288
Three-dimensional transonic shear flow in a channel
p0010 A78-12290
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
Computation of transonic potential flows in turbomachinery
p0011 A78-12293
Finite difference procedure for unsteady transonic flows - A review
p0011 A78-12294
Comparison of a finite difference method with a time-marching method for blade to blade transonic flow calculations
p0011 A78-12295
Application of a multi-level grid method to transonic flow calculations
p0011 A78-12296
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297
Finite-difference calculations of three-dimensional transonic flow through a compressor blade row, using the small-disturbance nonlinear potential equations
p0011 A78-12298
Transonic relaxation methods
p0011 A78-12299
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades
p0012 A78-12311
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
Comparison of prediction of transonic flow in a fan with flow measurements taken using a laser Doppler velocimeter
p0012 A78-12314
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
Displacement thickness distributions in transonic flows about 3-D wings
p0108 A78-17612
Transonic integral equation formulation for lifting profiles and wings
p0113 A78-18238
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
Numerical study of transonic profiles
p0120 A78-19061
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713

Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils
[AIAA PAPER 78-11] p0171 A78-22553
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Computational transonic flow about realistic aircraft configurations
[AIAA PAPER 78-104] p0172 A78-22576
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation --- German book
p0175 A78-22937
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
A least square finite element technique for transonic flow with shock
[AIAA PAPER 78-328] p0186 A78-24022
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
Some singular aspects of three-dimensional transonic flow
p0223 A78-26234
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Transonic flows past a lift profile
p0274 A78-28961
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
Variational principles for the transonic airfoil problem
p0285 A78-30891
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
Notes on the transonic indicial method --- for two dimensional airfoil flutter derivative calculation
p0376 A78-37732
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
Calculation of transonic flow through a turbine cascade by the time-step method
p0379 A78-38248
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
Investigations of the transonic flow around oscillating airfoils --- Thesis
p0383 A78-38978
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
Second order transonic small perturbation flow
p0424 A78-42198
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
The calculation of transonic flow over three-dimensional swept wings using the exact potential equation
p0477 A78-45232
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
The prediction of viscous effects on aerofoils in transonic flow
p0478 A78-45237
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
An experimental investigation of the drag of thick supercritical aerofoils - A progress report
p0478 A78-45243
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
Integral equation formulation for transonic flow past lifting wings
p0571 A78-50459
Numerical analysis of flow through turbine cascade by the Modified PLIC Method
p0576 A78-50607
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
Calculation of local three-dimensional supersonic fields
p0584 A78-51184
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185
On the nonstationary boundary layer with self-induced pressure at transonic external stream velocities
p0591 A78-52043
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
Calculations of some unsteady transonic flows about the NACA 64A006 and 64A010 airfoils
[AD-A046178] p0137 N78-13999
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
Transonic flow past an airfoil with condensation
[NASA-TM-75201] p0252 N78-19053
Unsteady transonic flow computations
[AD-A049188] p0254 N78-19068
Conservative implicit schemes for the full potential equation applied to transonic flows
[NASA-TM-78469] p0271 N78-19868
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050

Numerical study of transonic flow over oscillating airfoils using the full potential equation
[NASA-TP-1120] p0313 N78-21055
Aerodynamic phenomena in an oscillating transonic MCA airfoil cascade including loading effects
p0347 N78-22066
Numerical calculation of transonic flow past a swept wing by a finite volume method
[NASA-CR-157012] p0403 N78-24808
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118
A study of test section configuration for shock tube testing of transonic airfoils
[NASA-CR-157237] p0442 N78-26153
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
Computer program for relaxation solutions of the nonlinear small disturbance equations for transonic flow in an axial compressor blade row
[AD-A053744] p0504 N78-29412
The transonic flow on a helicopter rotor
p0557 N78-31042
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
Design of a transonically profiled wing
[NASA-TM-75440] p0604 N78-32052
A comparative study of two computational methods for calculating unsteady transonic flows about oscillating airfoils
[AD-A056946] p0623 N78-33058

TRANSONIC FLUTTER
F-16 flutter model studies with external wing stores
p0117 A78-18801
Calculation of the flow past a vibrating airfoil section in transonic gas flow
p0127 A78-19669
Notes on the transonic indicial method --- for two dimensional airfoil flutter derivative calculation
p0376 A78-37732
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004

TRANSONIC INLETS
U SUPERSONIC INLETS

TRANSONIC NOZZLES
Transonic swirling gas flow through a nozzle
p0170 A78-22355
Uniqueness 'in the large' of the solution to the direct problem of the Laval nozzle
p0376 A78-37613

TRANSONIC SPEED
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer exemplified with a transonic wing
[BMVG-FBWT-77-7] p0237 N78-18010
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
A transonic propeller of triangular plan form: An extension
[UTIAS-TN-218] p0454 N78-27123
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116

TRANSONIC TURBINES
U SUPERSONIC TURBINES

TRANSONIC WIND TUNNELS
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
An intermittent high Reynolds number wind tunnel
[AIAA 78-766] p0293 A78-32327
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
Condensation and its growth down the test-section of the Langley 0.3-m transonic cryogenic tunnel
[AIAA 78-811] p0296 A78-32365
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
Calibration and test capabilities of the Langley 7- by 10- foot high speed tunnel
[NASA-TM-X-74027] p0043 N78-11121
Description of the new regulating valve for the transonic supersonic wind tunnel
[DLR-IB-151-76/6] p0044 N78-11130
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038

Slotted test section dynamics of the NTF
[NASA-CR-155266] p0089 N78-12106
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
A study of acoustic disturbances and means of suppression in ventilated transonic wind tunnel walls
[AD-A045347] p0100 N78-13080
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
An analysis of the rotor blade stresses of the three stage compressor of the Ames Research Center 11- by 11-foot transonic wind tunnel
[NASA-CR-152083] p0209 N78-17061
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
Numerical design of streamlined tunnel walls for a two-dimensional transonic test
[NASA-TM-78641] p0364 N78-23105
Drag measurement in transonic wind tunnels
p0435 N78-26080
Prediction of aerodynamic characteristics of an aircraft from a correlation of results on a calibration model tested in various large transonic tunnels
p0436 N78-26088
Transonic wind tunnel tests on a NACA 0012 aerofoil
[ARL/AERO-REPT-148] p0437 N78-26095
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173
TRANSONICS
U TRANSONIC FLOW
TRANSPIRATION
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
TRANSPIRATION COOLING
U SWEAT COOLING
TRANSPONDERS
Avionics for the discrete address beacon system /DABS/
[AIAA 77-1511] p0007 A78-12256
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
The AN/APX-100/V/ transponder --- for military aircraft
p0537 A78-49971
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
Proposed methods and criteria for ATCRBS PRF assignment
[AD-A050050/4] p0360 N78-23074
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
TRANSPORT AIRCRAFT
NT A-300 AIRCRAFT
NT AN-24 AIRCRAFT
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT BOEING 747 AIRCRAFT
NT C-5 AIRCRAFT
NT C-9 AIRCRAFT
NT C-130 AIRCRAFT
NT C-135 AIRCRAFT
NT C-140 AIRCRAFT
NT C-141 AIRCRAFT
NT CARGO AIRCRAFT
NT CH-47 HELICOPTER
NT CONCORDE AIRCRAFT
NT DC 8 AIRCRAFT
NT DC 9 AIRCRAFT
NT DC 10 AIRCRAFT
NT EUROPEAN AIRBUS
NT F-27 AIRCRAFT
NT F-28 TRANSPORT AIRCRAFT
NT H-53 HELICOPTER
NT HFB-320 AIRCRAFT
NT L-1011 AIRCRAFT
NT SH-3 HELICOPTER
NT SHORT HAUL AIRCRAFT
NT SPANLOADER AIRCRAFT
NT TANKER AIRCRAFT
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
NT YC-14 AIRCRAFT
The timing of technology for commercial transport aircraft
p0001 A78-10192
Adaptation for economization, or adaptation for the economization of energy --- in transport aircraft design and operation
p0003 A78-12030
Energy savings - The viewpoint of an aircraft manufacturer
p0003 A78-12031
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
Technical exploitation of aircraft /2nd revised and enlarged edition/ --- Russian book
p0014 A78-12606
The improvement of various engine installation components in a subsonic transport aircraft
p0057 A78-15022
The next commercial jet transport: The need, economics, technology, and financing; Air Transportation Research International Forum, San Francisco, Calif., May 9, 1977, Papers
p0057 A78-15084
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
An optimistic view of the plane facts --- cost-efficient airliners development
p0057 A78-15086
The next generation of commercial aircraft - International perspective
p0057 A78-15087
Commercial air transport - The next ten years
p0058 A78-15091
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Tomorrow's tanker --- air-air refueling aircraft
p0077 A78-17099
Transport construction costs studied --- composite materials use in aircraft for cost reduction
p0078 A78-17129
Advancing transport aircraft technology towards 2000
p0078 A78-17135

The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
Active controls for transports
p0112 A78-18020
An appreciation of the dynamic problems associated with the external transportation of loads from a helicopter - State of the art
p0114 A78-18429
Current and future fuels for transport aircraft
p0116 A78-18669
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
Effect of wind turbulence and shear on landing . performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034
Prospects for a new generation air transport
[AIAA PAPER 78-363] p0186 A78-24035
Wing with fork tips as means of increasing cost effectiveness of transport aircraft
[DGLR PAPER 77-017] p0189 A78-24410
Integrated flight control system for future transport aircraft
[DGLR PAPER 77-035] p0190 A78-24425
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
The An-26 aircraft: Construction and use --- Russian book
p0283 A78-30273
Choice of engine design for small transport aircraft
p0283 A78-30357
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-31307
STOL system fuel savings - Ground and air
p0287 A78-31312
The energy costs of some noise abatement procedures
p0288 A78-31313
Air traffic control and energy conservation in air operations
p0288 A78-31314
Composite structures for commercial transport aircraft
p0337 A78-34901
Application of modern methods in civil aircraft construction
p0382 A78-38808
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
A solar airship - More than a flight of fancy --- solar cell powered transport aircraft
p0469 A78-44226
Impact protective design of occupant environment transport aircraft
[SAE ARP 767A] p0471 A78-44687
Fault isolation in environmental control systems of commercial transports
[SAE AIR 1266] p0472 A78-44696
An experiment on the gust response of a transport airplane by free-flight model
p0474 A78-44835
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
A perspective of laminar-flow control --- aircraft energy efficiency program
[AIAA PAPER 78-1528] p0481 A78-46503
From Challenger to winner --- Canadair executive jet design and development
p0510 A78-47570
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
Conceptual design study of power augmented ram wing in ground effect aircraft
[AIAA PAPER 78-1466] p0512 A78-47915
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
Takeoff performance of STOL aircraft
p0527 A78-49744
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
Optimization of quasi-stationary long distance flights in the case of different directions for conducting the flight according to a model which has been idealized to a large extent --- German thesis
p0589 A78-51749
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
Innovative aircraft design study. Task 2: Design subtask 1. Chemically fueled aircraft. Volume 2: Appendices
[AD-A044319] p0023 N78-10054
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Sensitivity of the Shoe-Box in P001 analysis
[AD-A043707] p0038 N78-11055
Effects of landing approach methods and separation intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
Exploratory investigation of decelerating approaches of a twin-engined jet transport. Volume 2: Moving-base simulation and comparison with related experiments
[NLR-TR-76150-U] p0155 N78-15859
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high

subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8474] p0299 N78-20065
A new method for estimating current and future transport aircraft operating economics
[NASA-CR-145190] p0303 N78-20094
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Factors affecting the retirement of commercial transport jet aircraft
[NASA-CR-152115] p0316 N78-21092
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
Fuel conservation merits of advanced turboprop transport aircraft
[NASA-CR-152096] p0316 N78-21095
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
Amelioration of various components of a subsonic transport aircraft engine
[AAAF-NT-77-31] p0353 N78-22109
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
Application of laminar flow control to large subsonic military transport airplanes
[AD-A052422] p0394 N78-24098
Aircraft size and air transport costs
p0395 N78-24112
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0433 N78-26066
CTOL transport technology, 1978 --- conferences
[NASA-CP-2036-PT-1] p0446 N78-27046
Overview of NASA CTOL program
p0446 N78-27047
Key issues in application of composites to transport aircraft
p0448 N78-27063
Laminar flow control overview
p0448 N78-27066
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
Toward a laminar-flow-control transport
p0449 N78-27071
Composite structures for commercial transport aircraft
[NASA-TM-78730] p0457 N78-27183
The military utility of very large airplanes and alternative fuels
[AD-A053604] p0487 N78-28051
CTOL Transport Technology, 1978 --- conferences
[NASA-CP-2036-PT-2] p0496 N78-29046
Advanced aerodynamics and active controls technology
p0496 N78-29047
Experimental results of winglets on first, second, and third generation jet transports --- to reduce drag coefficient
p0496 N78-29048
Advanced aerodynamics and active controls for a next generation transport
p0497 N78-29052
Active controls technology to maximize structural efficiency
p0497 N78-29053
Summary of NASA landing-gear research
p0497 N78-29056
Noise prediction technology for CTOL aircraft
p0497 N78-29057
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088

TRANSPORT COEFFICIENTS
U TRANSPORT PROPERTIES

TRANSPORT PROPERTIES
NT DIFFUSION COEFFICIENT
NT EDDY VISCOSITY
NT ELECTRICAL RESISTIVITY
NT THERMAL CONDUCTIVITY
NT VISCOSITY
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118

TRANSPORTATION
NT AIR TRANSPORTATION
NT RAIL TRANSPORTATION
NT RAPID TRANSIT SYSTEMS
NT SPACE TRANSPORTATION
NT URBAN TRANSPORTATION
Automation in transportation in 1990 --- overview
p0416 A78-40867
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069

TRANSPORTATION ENERGY
Aviation fuel usage - Economy and conservation
p0285 A78-30698
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600

TRANSVERSE OSCILLATION
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity --- rotor precession in steam turbines
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066

TRANSVERSE VIBRATION
U TRANSVERSE OSCILLATION

TRAPEZOIDAL WINGS
Supersonic flow near a thin trapezoidal wing
p0166 A78-20921
Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
Unsteady pressure distribution measurements at two trapezoidal wings with unit aspect ratio
p0205 N78-17020
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056

TRAVELING CHARGE
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364

TRAVELING WAVE TUBES
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173

TREADS
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043

TREES (MATHEMATICS)
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070
TRIANGLES
A transonic propeller of triangular plan form: An extension
[UTIAS-TN-218] p0454 N78-27123
TRIANGULAR WINGS
U DELTA WINGS
TRIANGULATION
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
UHF DF triangulation system for control and guidance of military aircraft
p0315 N78-21077
TRIBOLOGY
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
TRIGGERS
U ACTUATORS
TRIM (BALANCE)
U AERODYNAMIC BALANCE
TROPICAL METEOROLOGY
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
TROPOSPHERE
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
TROUBLESHOOTING
U MAINTENANCE
TROUGHS
Supersonic through-flow fan engines for supersonic cruise aircraft
[NASA-TM-78889] p0361 N78-23088
TRUCKS
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069
TRUNCATION (MATHEMATICS)
U APPROXIMATION
TRUNNIONS
U SHAFTS (MACHINE ELEMENTS)
TRUSSES
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials
p0169 A78-21971
TUNGSTEN ALLOYS
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
TUNGSTEN INERT GAS WELDING
U GAS TUNGSTEN ARC WELDING
TUPOLEV AIRCRAFT
Backfire - The bogeyman bomber --- Soviet strategic aircraft
p0116 A78-18699
TURBINE BLADES
Investigation of turbine blade endurance during thermal cycling and vibration in a gas stream
p0001 A78-10267
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
Comparison of a finite difference method with a time-marching method for blade to blade transonic flow calculations
p0011 A78-12295
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297
Some problems of GTE blade transpiration cooling
p0049 A78-13166
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
Aircraft tracking problems from range rate 'turbine modulation'
p0063 A78-15631
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
Design of long blades by method of constant circulation
p0122 A78-19230
Application of skin technology to turbine blades --- zero gravity manufacture
[AIAA PAPER 78-285] p0163 A78-20792
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
Steady-state bulk temperature field in cooled turbine blades
p0187 A78-24156
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
The promise of eutectics for aircraft turbines
p0215 A78-24882
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
An analytic study of the energy dissipation of turbomachinery bladed-disk assemblies due to inter-shroud segment rubbing
[ASME PAPER 77-DET-73] p0338 A78-35231
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
Investigation of turbine stages with radial blades
p0467 A78-43643
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
Film cooling of a gas turbine blade
p0573 A78-50580
Temperature profiles of rotating cooled blade --- via infrared photography of air-cooled turbine blades
p0573 A78-50581
Experimental verification of a blade cooling system and comparison with design calculation --- in high temperature test turbine
p0573 A78-50583

Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
Numerical analysis of flow through turbine cascade by the Modified FLIC Method
p0576 A78-50607
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
A theoretical and experimental analysis of the influence of coolant discharge from perforated turbine blades on their aerodynamic behavior
p0580 A78-50777
Fatigue crack growth of titanium fan blades
p0589 A78-51744
Blade fragment energy analysis
p0025 N78-10074
Lightweight engine containment --- Kevlar shielding
p0026 N78-10080
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092
The promise of eutectics for aircraft turbines
[NASA-TM-73714] p0028 N78-10098
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
New materials for high temperature turbines; ONERA's DS composites confronted with blade problems
[NASA-TM-75216] p0087 N78-12085
Protection of cooled blades of complex internal structure
[NASA-TM-75217] p0087 N78-12086
Study on stage of centrifugal compressor with air turbine
[AD-A045436] p0101 N78-13452
Filament-winding fabrication of QCSEE configuration fan blades
[NASA-CR-135332] p0198 N78-16052
An analytical study of thermal barrier coated first stage blades in a JT9D engine
[NASA-CR-135360] p0198 N78-16054
Analytical study of thermal barrier coated first-stage blades in an F100 engine
[NASA-CR-135359] p0208 N78-17058
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
Project optimisation of military gas turbines with respect to turbine life
p0319 N78-21120
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
Investigations of the local heat transfer coefficient of a convection cooled rotor blade
p0319 N78-21126
Investigation on temperature distribution near film cooled airfoils
p0320 N78-21127
Erosion prevention and film cooling on vanes
p0320 N78-21128
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
New materials for high temperature turbines: ONERA's DS composites confronted with the blade problems
p0321 N78-21139
Protection of cooled blades of complex internal structure
p0321 N78-21141
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
Turbojet engine performance at high turbine entry temperatures with transpiration cooled turbine blading
p0351 N78-22095
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
A computer program for full-coverage film-cooled blading analysis including the effects of a thermal barrier coating
[NASA-TM-78951] p0454 N78-27126
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
Stress analysis of ceramic turbine blades by finite element method, part 1
[AD-A056310] p0629 N78-33111

TURBINE ENGINES
NT DUCTED FAN ENGINES
NT GAS TURBINE ENGINES
NT J-85 ENGINE
NT JET ENGINES
NT RAMJET ENGINES
NT SUPERSONIC COMBUSTION RAMJET ENGINES
NT T-38 ENGINE
NT T-58 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT TURBOFAN ENGINES
NT TURBOJET ENGINES
NT TURBOPROP ENGINES
Helicopter manufacturing technology. II - Drive system and turbine engine technology
p0014 A78-12610
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Turbine engine slip ring technology - A survey --- for aircraft
[SAE PAPER 770976] p0179 A78-23820
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648

Gas path sealing in turbine engines
p0330 A78-33218
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
Rotor burst protection criteria and implications
p0025 N78-10071
Engine non-containment: UK risk assessment methods
p0025 N78-10072
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
NDE: A key to engine rotor life prediction
p0027 N78-10087
Some airline experience in preventing engine rotor failures
p0027 N78-10090
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
New materials for high temperature turbines; ONERA's DS composites confronted with blade problems
[NASA-TM-75216] p0087 N78-12085
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
Low cycle fatigue in turbines
[NASA-TM-75264] p0264 N78-19156
Protection of cooled blades of complex internal structure
p0321 N78-21141
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478

TURBINE EXHAUST NOZZLES
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400

TURBINE INSTRUMENTS
Calibration of gas turbine instrumentation
p0105 A78-17361

TURBINE WHEELS
Transient expansion of the components of an air seal on a gas turbine disc
[SAE PAPER 770974] p0179 A78-23818
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
An analytic study of the energy dissipation of turbomachinery bladed-disk assemblies due to inter-shroud segment rubbing
[ASME PAPER 77-DET-73] p0338 A78-35231
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
A computer-aided method of calculating temperature fields in turbine disks
p0581 A78-50796
Inviscid flow through wide-angle diffuser with actuator disk --- for wind turbine augmentation
p0597 A78-53095
Ceramic composite protection for turbine disc bursts --- for the A-300 aircraft
p0026 N78-10083
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
Materials and manufacturing processes for increased life/reliability --- of turbine wheels
p0027 N78-10086
Application of a flight-line disk crack detector to a small engine
p0027 N78-10088
Turbine disks for improved reliability
p0027 N78-10089
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109

TURBINES
NT AXIAL FLOW TURBINES
NT GAS TURBINES
NT SHROUDED TURBINES
NT STEAM TURBINES
NT SUPERSONIC TURBINES
NT TWO STAGE TURBINES
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14998
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104

TURBOCHARGERS
U TURBOCOMPRESSORS

TURBOCOMPRESSORS
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
Generation and suppression of fan-compressor noise
p0075 A78-16599
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
Aerodynamic behavior of an axial-flow compressor in the presence of inflow disturbances
[DGLR PAPER 77-064] p0116 A78-18706
Supersonic axial compressors with predeceleration by oblique shocks
p0119 A78-19045
Determination of the type of rotating stall in an axial compressor stage
p0131 A78-20255
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769

Loss prediction in axial compressors - A bibliographic study
[ONERA, TP NO. 1978-65] p0383 A78-38892
Inlet flow distortions in axial flow compressors
p0419 A78-41508
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
[AD-A043543] p0029 N78-10107
Secondary flows in turbomachines
[AGARD-CP-214] p0041 N78-11083
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
Amplification of distortions in an axial compressor stage
p0046 N78-11983
Evaluation of a low aspect ratio small axial compressor stage, volume 1
[NASA-CR-135240] p0086 N78-12081
Evaluation of a low aspect ratio small axial compressor stage, volume 2
[NASA-CR-135241] p0086 N78-12082
A cascade in unsteady flow
[AD-A045319] p0091 N78-12381
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091
A comparison of experimental results and three-dimensional theoretical predictions for a compressor rotor with inlet-distortion, with special reference to Stalling
[CUED/A-TURBO/TR-91] p0362 N78-23092
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
End-wall boundary layer prediction for axial compressors
[NASA-TM-78928] p0441 N78-26144
Core compressor exit stage study. Volume 1: Blading design --- turbofan engines
[NASA-CR-135391] p0501 N78-29099
Computer program for relaxation solutions of the nonlinear small disturbance equations for transonic flow in an axial compressor blade row
[AD-A053744] p0504 N78-29412
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038

TURBOCONVERTERS
U TURBOGENERATORS
TURBOELECTRIC CONVERSION
U TURBOGENERATORS
TURBOFAN AIRCRAFT
NT A-7 AIRCRAFT
NT BOEING 727 AIRCRAFT
NT BOEING 737 AIRCRAFT
NT C-141 AIRCRAFT
NT CONCORDE AIRCRAFT
NT DC 8 AIRCRAFT
NT F-28 TRANSPORT AIRCRAFT
NT F-111 AIRCRAFT
NT IL-62 AIRCRAFT
NT F-1127 AIRCRAFT
NT SAAB 37 AIRCRAFT
The aircraft ducted fan
p0286 A78-31153
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
TURBOFAN ENGINES
NT TF-30 ENGINE
NT TF-41 ENGINE
The characteristics, prediction and test analysis of supersonic flutter in turbofan engines
p0058 A78-15176
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
Generation and suppression of fan-compressor noise
p0075 A78-16599
The design and performance of high temperature turbines in turbofan engines
p0112 A78-18023
Big fans for the airlines
p0170 A78-22269
Development of low pressure ratio vectoring nozzles for V/STOL aircraft
[SAE PAPER 770988] p0180 A78-23825
Gas path analysis applied to pre and post overhaul testing of JT9D turbofan engine
[SAE PAPER 770993] p0180 A78-23829
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
Optimal controls for an advanced turbofan engine
p0183 A78-23893
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
Failure detection and correction for turbofan engines
p0184 A78-23918
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime
p0187 A78-24275
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
Output feedback regulator design for jet engine control systems
p0215 A78-24898
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
Return of the propeller
p0220 A78-25516
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
Giants battle in US small turbine market --- jet engines for small aircraft
p0274 A78-29174
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
The aircraft ducted fan
p0286 A78-31153

An example of additive damping as a cost savings alternative to redesign --- turbofan engine inlet development
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
State-of-the-art of turbofan engine noise control
p0340 A78-35658
Rolls-Royce RB401 turbofan - A new business jet engine for the 1980's
p0375 A78-37538
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
Low frequency augmentor instability study --- afterburning effects in turbofan engines
[AIAA PAPER 78-996] p0464 A78-43543
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
The second generation of high-bypass turbofans - A market clouded by uncertainty
p0509 A78-47423
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497
Choice of cycle for a regenerative bypass turbojet for long-range aircraft
p0527 A78-49723
Design and verification of a turbofan Swirl augmentor
p0572 A78-50564
Recent status on research and development of PJR 710 turbofan engine --- for subsonic civil transport aircraft
p0573 A78-50577
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609
A study of fan-rotating noise reduction
p0577 A78-50620
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
Future large civil turbofans and powerplants /Seventeenth Short Bros. Commemorative Lecture/
p0587 A78-51519
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
[AD-A043543] p0029 N78-10107
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067
Improved resistance to engine bird ingestion
[AD-A044203] p0041 N78-11105
Altitude test of several afterburner configurations on a turbofan engine with a hydrogen heater to simulate an elevated turbine discharge temperature
[NASA-TP-1068] p0041 N78-11106
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
Augmentor emissions reduction technology program --- for turbofan engines
[NASA-CR-135215] p0097 N78-13057
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
Some problems of exploitation of jet turbine aircraft engines of Lot Polish Air Lines
[AD-A046221] p0151 N78-15048
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
TF-30-P-7 installed trim correction
[AD-A047023] p0199 N78-16058
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068
Life-cycle analysis of aircraft turbine engines
[AD-A050349] p0308 N78-20135
Supersonic through-flow fan engines for supersonic cruise aircraft
[NASA-TM-78889] p0361 N78-23088
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145
Acoustic evaluation of a novel swept-rotor fan --- noise reduction in turbofan engines
[NASA-TM-78878] p0403 N78-24897
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report
[AD-A053362] p0409 N78-25098
Prediction of off-design performance of turbojet and turbofan engines
p0434 N78-26077
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
Propulsion systems noise technology
p0447 N78-27056
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots

[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
Core compressor exit stage study. Volume 1: Blading design --- turbofan engines
[NASA-CR-135391] p0501 N78-29099
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
Procedures for generation and reduction of linear models of a turbofan engine
[NASA-TP-1261] p0556 N78-30896
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
DYGABCD: A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110

TURBOFANS
Comparison of prediction of transonic flow in a fan with flow measurements taken using a laser Doppler velocimeter
p0012 A78-12314
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
Rotor-stator interaction noise with hindsight --- turbomachine acoustics
p0329 A78-33093
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Broadband noise in axial-fan blade cascade
p0579 A78-50650
Blade fragment energy analysis
p0025 N78-10074
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
On the use of relative velocity exponents for jet engine exhaust noise
[NASA-TM-78873] p0398 N78-24137
Acoustic evaluation of a novel swept-rotor fan --- noise reduction in turbofan engines
[NASA-TM-78878] p0403 N78-24897
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104
Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107

TURBOGENERATORS
Performance-optimized horizontal-axis wind turbines
p0170 A78-22232
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
Some contributions to aerodynamic theory for vertical-axis wind turbines
p0327 A78-32534

TURBOJET AIRCRAFT
U JET AIRCRAFT

TURBOJET ENGINE CONTROL
Solution of transient optimization problems by using an algorithm based on nonlinear programming
p0184 A78-23909
Output feedback regulator design for jet engine control systems
p0215 A78-24898
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
Tentative establishment of a mathematical model of a turbojet engine, as a controlled system
p0229 A78-27567
Control of aircraft turbine engine acceleration
p0277 A78-29583
Using simulation to determine the transfer function of the electronic part of a control loop --- for gas turbine aircraft engines
p0277 A78-29584
Properties of hydraulic servomotor controlled by flapper valve or by edge valve --- turbojet engine system
p0277 A78-29587
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
Prediction of off-design performance of turbojet and turbofan engines
p0434 N78-26077

TURBOJET ENGINES
NT DUCTED FAN ENGINES
NT J-85 ENGINE
NT T-38 ENGINE
NT T-55 ENGINE
NT TF-30 ENGINE
NT TF-41 ENGINE
NT TURBOFAN ENGINES
NT TURBOPROP ENGINES
Noise of aerodynamic and, in particular, turbojet origin
[ONERA, TP NO. 1977-161] p0075 A78-16618
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Twenty year evolution of the WR2/WR24 series of small turbojet engines
[SAE PAPER 770998] p0181 A78-23833
Failure state detection of aircraft engine output sensors
p0184 A78-23906
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
Aircraft propulsion from the back room /Sixty-sixth Wilbur and Orville Wright Memorial Lecture/
p0369 A78-36279
Aero engines climb towards better fuel efficiency
p0372 A78-37114
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
Use of a field bench for testing turbojet engines
p0527 A78-49731
Operating characteristics of bypass turbojet engines --- Russian book
p0540 A78-50125
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
Comparison of the characteristics of bypass turbojet engine employing a small-size gas-turbine in the outer duct with those of a

turbojet engine in supersonic cruising flight
p0581 A78-50790
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Engine non-containment: The UK CAA view
p0025 N78-10070
Approaches to rotor fragment protection
p0026 N78-10076
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
[AD-A043543] p0029 N78-10107
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
Design, construction and testing of a sub-scale turbojet test cell
[AD-A043005] p0044 N78-11126
A study of opportunistic replacement tactics for modular jet engine management
[AD-A044184] p0079 N78-12001
Protection of cooled blades of complex internal structure
[NASA-TM-75217] p0087 N78-12086
ENGINEL: A single rotor turbojet engine cycle match performance program
[NASA-CR-145267] p0087 N78-12089
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Genesis N + 1: The origins of the turbo-jet revolution
p0252 N78-19047
Approximate dynamic model of a turbojet engine
[NASA-TM-75263] p0264 N78-19159
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
A sub-scale turbojet test cell for design evaluations and analytical model validation
[AD-A049862] p0324 N78-21166
Turbojet engine performance at high turbine entry temperatures with transpiration cooled turbine blading
p0351 N78-22095
Fundamental aspects of the aerodynamics of turbojet engine combustors
[NASA-TM-75287] p0398 N78-24142
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
USAF bioenvironmental noise data handbook. Volume 83: KC-135A aircraft, near and far-field noise
[AD-A054138] p0495 N78-28893
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101
Turbine engine particulate emission characterization, phase 2
[AD-A057370] p0628 N78-33106
DYGABCD: A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110

TURBOMACHINE BLADES
NT COMPRESSOR BLADES
NT ROTOR BLADES (TURBOMACHINERY)
NT STATOR BLADES
NT TURBINE BLADES
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades
p0012 A78-12311
Studies to gain insight into the complexities of blade vibration phenomena
p0058 A78-15175
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
Geometric properties of NACA profiles
p0328 A78-33005
Rotor-stator interaction noise with hindsight --- turbomachine acoustics
p0329 A78-33093
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435
The next approximation after boundary layer theory --- machine blade associated unsteady flow effects
p0373 A78-37409
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
Boundary layer development on axial-flow turbomachinery blading
p0468 A78-43863
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
Rotor burst protection criteria and implications
p0025 N78-10071
Research on the flutter of axial-turbomachine blading
[AD-A047086] p0194 N78-16021
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105

TURBOMACHINERY
NT AXIAL FLOW TURBINES
NT CENTRIFUGAL COMPRESSORS
NT CENTRIFUGAL PUMPS
NT GAS TURBINES
NT SHROUDED TURBINES
NT STEAM TURBINES
NT SUPERSONIC TURBINES
NT TURBINES
NT TURBOCOMPRESSORS
NT TURBOFANS
NT TURBOGENERATORS
NT TWO STAGE TURBINES
Computation of transonic potential flows in turbomachinery
p0011 A78-12293
Transonic relaxation methods
p0011 A78-12299
Supercritical cascade design
p0012 A78-12302
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
Study of a turbomachine combustor with swirling flow
[ONERA, TP NO. 1977-170] p0108 A78-17662
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
Finite-element analysis of three-dimensional potential flow in turbomachines
p0416 A78-40831
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
Isoperimetric problems of the theory of supercavitated mechanisms
p0477 A78-45172
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
Inviscid flow through wide-angle diffuser with actuator disk --- for wind turbine augmentation
p0597 A78-53095
Technical evaluation report on the 49th(A) Propulsion and Energetics Panel Specialists' Meeting on Secondary Flows in turbomachines
[AGARD-AR-109] p0142 N78-14052
Project SQUID
[AD-A047076] p0199 N78-16056

Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109
A study of the effect of the rotor coil couplings of a synchronous machine on its predicted transient response
p0632 N78-33330

TURBOPROP AIRCRAFT
NT AN-24 AIRCRAFT
NT C-130 AIRCRAFT
NT F-27 AIRCRAFT
Adaptation for economization, or adaptation for the economization of energy --- in transport aircraft design and operation
p0003 A78-12030
The Dash 7 - An aircraft for today's environment
p0004 A78-12213
20 years IL-18 --- aircraft design features, capabilities and applications
p0050 A78-13497
The An-26 aircraft: Construction and use --- Russian book
p0283 A78-30273
The promise of tilt rotor
p0508 A78-47266
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
A parametric investigation of an existing supersonic relative tip speed propeller noise model --- turboprop aircraft
[NASA-TM-73816] p0102 N78-13854
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066

TURBOPROP ENGINES
NT T-38 ENGINE
Review of the development of small- and medium-capacity gas turbines at the Motoren- und Turbinen Union
[DGLR PAPER 77-061] p0116 A78-18702
Advanced turboprop propulsion system reliability and maintenance cost
[SAE PAPER 771009] p0182 A78-23841
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
Return of the propeller
p0220 A78-25516
Giants battle in US small turbine market --- jet engines for small aircraft
p0274 A78-29174
Influence of structural components of a by-pass engine on its flight characteristics --- STOL aircraft
p0277 A78-29582
Choice of engine design for small transport aircraft
p0283 A78-30357
An economic and technical perspective of the turboprop engine in Ag-aviation
p0375 A78-37536
Propulsion --- NASA program for aircraft fuel consumption reduction
p0461 A78-43360
Pollution reduction technology program for turboprop engines
p0039 N78-11069
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
Status of advanced turboprop technology
p0447 N78-27055

TURBOROTORS
U TURBINE WHEELS

TURBOSHAFTS
Advantages of 3-shaft KTT gas turbine configurations for automotive applications
p0575 A78-50602
Radiographic examination of T55 engine
[AD-A055108] p0564 N78-31113

TURBULENCE
NT ATMOSPHERIC TURBULENCE
NT CLEAR AIR TURBULENCE
NT GUSTS
NT ISOTROPIC TURBULENCE
NT LOW LEVEL TURBULENCE
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
Project SQUID
[AD-A047076] p0199 N78-16056
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
Structure of turbulence in complex flows --- effects of unsteadiness and three dimensionality
p0494 N78-28407
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
Noise due to rotor-turbulence interaction
p0619 N78-32823

TURBULENCE EFFECTS
A flight path correlation technique for assessing the impact of turbulence in the atmospheric boundary layer on aircraft during the landing approach
p0055 A78-14961
Account of mainstream turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 77-HT-10] p0106 A78-17483
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
Atmospheric turbulence loads on aircraft
p0175 A78-23049
Theory of two frequency ranges of unstable oscillations of turbulent combustion in a jet-engine chamber. I - Formulation of the stability problem, the characteristic equation
p0187 A78-24253
A case for a new model for turbulent flame propagation
p0229 A78-27840
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
Aircraft motions in moving air
p0425 A78-42449
Separation problems encountered by aircraft designers csa Div. des Etudes Avancees.
p0249 N78-18377
A review and application of the equivalent deterministic variable technique: The estimation of a STOL aircraft's response to turbulence
[UTIAS-221] p0353 N78-22112

TURBULENCE METERS
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058

TURBULENT BOUNDARY LAYER
Stratford's turbulent separation criterion for axially-symmetric flows
p0002 A78-11635
Recent developments in numerical solutions for equations of the boundary layer in laminar and turbulent flow
p0118 A78-19030
Turbulent boundary layer on a moving surface
p0163 A78-20850
Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
Turbulent airfoils for general aviation
p0188 A78-24364
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
Some important physical phenomena in flows with separated turbulent boundary layers

p0336 A78-34839
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling performance
p0573 A78-50582
Turbulent boundary layer separation on a curved wall with normal compression shock
p0583 A78-51155
Interaction of turbulent boundary layers in a right-angle corner
p0588 A78-51697
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
Leading edge transition on swept wings
p0144 N78-14336
Research on unsteady turbulent boundary layers
p0146 N78-14992
Effects of acoustic and vortical disturbances on the turbulent boundary layer at free-stream Mach number 0.5
[AD-A047921] p0205 N78-17026
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer exemplified with a transonic wing
[BMVG-FBWT-77-7] p0237 N78-18010
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19048
Boundary separation problems faced by aircraft designers
p0493 N78-28399
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0 --- supersonic heat transfer and skin friction
p0606 N78-32065
M=3 turbulent boundary layer measurements at very high Reynolds numbers --- supersonic wind tunnel tests
[AD-A055952] p0607 N78-32072

TURBULENT FLOW
NT CAVITATION FLOW
NT SUPERCAVITATING FLOW
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
Reliable lifting surface solutions for unsteady flow
[AIAA PAPER 78-228] p0161 A78-20757
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
The noise from the large-scale structure of a jet
p0227 A78-27144
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
Theory on the two-frequency ranges for the unsteady fluctuations of the turbulent combustion process in a jet-engine combustion chamber. II - Analysis of the characteristic equation, comparison with the experiment
p0580 A78-50778
Thirty years of fluid dynamics
p0585 A78-51280
Two different theoretical approaches to the base pressure problem in two-dimensional supersonic flow
p0600 A78-53767
Calculation of the compressible boundary layer around a profile
[AAAF-NT-77-08] p0034 N78-11019
Soot formation in a turbulent swirling flow
p0040 N78-11075
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
On some structure-turbulence interaction problems
p0193 N78-15996
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
Acoustic interference effects and the role of Helmholtz number in aerodynamic noise
[DLR-IB-257-77/11] p0251 N78-18878
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
The influence of coolant turbulence intensity on film cooling effectiveness
p0321 N78-21136
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
The YF-12 gust velocity measuring system
p0605 N78-32061

TURBULENT HEAT TRANSFER
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402

TURBULENT JETS
Noise of aerodynamic and, in particular, turbojet origin
[ONERA, TP NO. 1977-161] p0075 A78-16618
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
Pressure dependence of turbulent jet noise
p0470 A78-44357
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763

TURBULENT MIXING
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
TURBULENT WAKES
NT PROPELLER SLIPSTREAMS
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
Preliminary comparison of model and prototype wakes --- building wake effects on atmospheric boundary layer
[AIAA PAPER 78-254] p0162 A78-20774
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Wake turbulence - Gone with the wind --- airport advisory system for aircraft generated vortices
p0188 A78-24347
Spanwise structure of the plane turbulent wake
p0221 A78-25777
Effect of blockage ratio on the turbulent near wake of a bluff body
p0224 A78-26489
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
Calculating the interaction of a turbulent near wake behind a step and a supersonic jet
p0230 A78-28057
Some measurements in two-dimensional turbulent wakes
p0289 A78-31836
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
Wake cutting experiments --- turbulent wake-blade (airfoil) interaction
p0336 A78-34843
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports
p0428 A78-43053
Calculation of interaction of a turbulent near-wake behind a step with a supersonic jet
p0480 A78-46092
Investigations of the intensity of oscillations of the boundary of a turbulent wake
p0586 A78-51402
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
Unsteady hovering wake parameters identified from dynamic model tests
p0203 N78-16992
A preliminary study of the benefits of flying by ground speed during final approach
[NASA-TM-78777] p0608 N78-32076
TURNING FLIGHT
Analysis of optimal turning maneuvers in the vertical plane --- for high thrust aircraft
[AIAA 78-1333] p0482 A78-46531
Bank-to-turn /BIT/ autopilot technology --- for missiles
p0534 A78-49927
TVC (CONTROL)
U THRUST VECTOR CONTROL
TWISTED WINGS
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
TWISTING
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
TWO DIMENSIONAL BODIES
Notes on the transonic indicial method --- for two dimensional airfoil flutter derivative calculation
p0376 A78-37732
Aerodynamic interference in a system of two harmonically oscillating airfoils and its influence on flutter
p0019 N78-10016
TWO DIMENSIONAL BOUNDARY LAYER
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887
TWO DIMENSIONAL FLOW
Stratford's turbulent separation criterion for axially-symmetric flows
p0002 A78-11635
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Thick, two-dimensional wake roll-up behind a wing of finite span - Extended calculations
p0078 A78-17131
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
Two new correlation dependencies for parameters of flow on a plane delta wing
p0166 A78-20933
Entropy layer in two-dimensional flows --- hypersonic ideal gas flow behind shock wave
p0168 A78-21132
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
Spanwise structure of the plane turbulent wake
p0221 A78-25777
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
Experimental verification of an annular aerofoil theory
p0230 A78-27938
Some measurements in two-dimensional turbulent wakes
p0289 A78-31836
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649

Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
Calculation of transonic flow through a turbine cascade by the time-step method
p0379 A78-38248
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
The closed spline functions --- applied to interpolation problems for airfoils
p0415 A78-40493
A new method of nozzle design
p0416 A78-40839
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200
Construction of higher approximations in the problem of special flows in plane Laval nozzles
p0426 A78-42764
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
The effect of two-dimensionality of the flow of a gas with stepwise distribution of total parameters on the integral characteristics of a Laval nozzle
p0429 A78-43116
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
Linearized theory of plane, unsteady, supersonic flow through a cascade - Subsonic part of the leading edge
[ONERA, TP NO. 1978-103] p0508 A78-47347
Vortex dynamics
p0582 A78-51051
Calculation of viscous flow in straight weakly divergent diffusors
p0583 A78-51158
Computation of two-dimensional potential flow using elementary vortex distributions
p0590 A78-51948
Two different theoretical approaches to the base pressure problem in two-dimensional supersonic flow
p0600 A78-53767
Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2 --- tabulated test results
[NASA-CR-2915] p0203 N78-16998
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093

TWO DIMENSIONAL JETS
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
Distortion of a flat jet in a bounded cross-stream in the presence of a wake space
p0580 A78-50779
The attachment of a ventilated plane jet to an inclined plane wall
p0600 A78-53764

TWO PHASE FLOW
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
Possibilities of phase separation in supersonic two-phase flows
p0426 A78-42630
Investigation of nonequilibrium two-phase flows in axisymmetric Laval nozzles
p0518 A78-48244
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089

TWO STAGE TURBINES
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103

U

U.S.S.R.
Increasing the survivability of combat aircraft
[AD-A045910] p0140 N78-14038
The Soviet attack helicopter
[AD-A050649] p0349 N78-22080
Translations on USSR science and technology: Physical science and technology, no. 42
[JPRS-71612] p0621 N78-33015
Translations on USSR science and technology: Physical science and technology, no. 44
[JPRS-71659] p0621 N78-33024

U.S.S.R. SPACE PROGRAM
From space on a parachute
[NASA-TM-75577] p0631 N78-33140

U-2 AIRCRAFT
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914

UH-1 HELICOPTER
UTTAS testing
p0233 A78-28461
Airworthiness evaluation NUH-1H helicopter with global positioning system
[AD-A047971] p0242 N78-18053
Correlation study of the UH-1B helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089
Bell UH-1H RAM/LOG report
[AD-A057231] p0626 N78-33091

UH-60A HELICOPTER
Sikorsky YUH-60A UTTAS helicopter flight test program
p0125 A78-19449
Army UTTAS program --- UH-60A helicopter for Utility Tactical Transport Aircraft System
[SAE PAPER 770952] p0179 A78-23803
Black Hawk, Lamps and AAH
p0225 A78-26533
UTTAS testing
p0233 A78-28461

UH-61A HELICOPTER
UTTAS/HLH rotor blade fabrication and testing --- YUH-61A and XCH-62A helicopters
p0050 A78-13456
UTTAS testing
p0233 A78-28461

ULTRA SHORT WAVE RADIO EQUIPMENT
U VERY HIGH FREQUENCY RADIO EQUIPMENT

ULTRAHIGH FREQUENCIES
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
The AN/ARC-164 radio - Life-cycle-cost savings --- UHF communication equipment reliability and maintainability improvement
p0276 A78-29479

Results of the NASA/NARAD L-band satellite navigation experiment
p0375 A78-37525
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data --- EMC studies of approach radar and of aircraft UHF-receiver
p0384 A78-39101
Experimental determination of a more powerful burn-in
p0481 A78-46321
L-band air-to-air multipath measurements --- for airborne collision avoidance systems
[AD-A045941] p0144 N78-14212
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325
ULTRASONIC FLAW DETECTION
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
ULTRASONIC TESTS
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
ULTRAVIOLET LIGHT
U ULTRAVIOLET RADIATION
ULTRAVIOLET RADIATION
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273
UNDERCARRIAGES
Performance implications of some recent advances in weapon carriage research
p0435 N78-26081
A statistical test of the calculated mean fatigue life using service experience --- applied to F-27 drag stay bracket
[FOK-S-144] p0440 N78-26138
UNDERWATER STRUCTURES
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
UNDERWATER VEHICLES
NT SUBMARINES
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
UNIFORM FLOW
NT BLASIUS FLOW
The low-speed air tunnel of the Institute of Hydromechanics at the University of Karlsruhe
p0176 A78-23297
UNIQUENESS THEOREM
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Uniqueness 'in the large' of the solution to the direct problem of the Laval nozzle
p0376 A78-37613
UNITED KINGDOM
Engine non-containment: The UK CAA view
p0025 N78-10070
Engine non-containment: UK risk assessment methods
p0025 N78-10072
V/STOL flying qualities requirements in the UK --- control during short takeoff
p0258 N78-19103
British military helicopter programmes
p0262 N78-19130
British Airways helicopter operations
p0262 N78-19133
UNITED STATES OF AMERICA
NT ALASKA
NT ARKANSAS
NT CALIFORNIA
NT GEORGIA
NT IOWA
NT MONTANA
NT NEVADA
NT NEW JERSEY
NT NEW YORK
NT PENNSYLVANIA
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
Aircraft wake vortices: A state-of-the-art review of the United States B and D program
[AD-A042442] p0195 N78-16025
Problems in world-wide standardization of the units of altitude measurement
[PB-277982/5] p0454 N78-27119
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075
UNITS OF MEASUREMENT
NT INTERNATIONAL SYSTEM OF UNITS
Practice and principle in environmental noise rating
[NPL-AC-81] p0367 N78-23885
UNIVAC COMPUTERS
NT UNIVAC 1100 SERIES COMPUTERS
UNIVAC 1100 SERIES COMPUTERS
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
UNMANNED SPACECRAFT
NT GEODETIC SATELLITES
NT NAVIGATION SATELLITES
NT NAVSTAR SATELLITES
NT TRANSIT SATELLITES
UNSTEADY FLOW
NT OSCILLATING FLOW
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
Finite difference procedure for unsteady transonic flows - A review
p0011 A78-12294
Asymptotic theory of the swept wing
p0052 A78-14053
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
Small perturbation expansions in unsteady aerofoil theory
p0074 A78-16401
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Aerodynamic behavior of an axial-flow compressor in the presence of inflow disturbances
[DGLR PAPER 77-064] p0116 A78-18706
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Hypersonic flow of a viscous gas in a nozzle
p0127 A78-19651
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
High-frequency approximation for a nonlifting thin airfoil in subsonic flow
[AIAA PAPER 78-226] p0161 A78-20755
Reliable lifting surface solutions for unsteady flow
[AIAA PAPER 78-228] p0161 A78-20757
Construction of a mathematical model of a jet engine for analyzing transient flows
p0167 A78-20971
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow

p0168 A78-21219
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
Unsteady boundary layer with self-induced pressure
p0230 A78-28102
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
A technique for vorticity measurement in unsteady flow
[AIAA 78-801] p0295 A78-32356
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
The next approximation after boundary layer theory --- machine blade associated unsteady flow effects
p0373 A78-37409
The mean velocity field of unsteady subsonic air jets
p0374 A78-37417
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
Factorization methods in hydroaeromechanics --- Russian book
p0378 A78-37887
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Unsteady incompressible flow past thin porous airfoils
p0427 A78-42918
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Linearized theory of plane, unsteady, supersonic flow through a cascade - Subsonic part of the leading edge
[ONERA, TP NO. 1978-103] p0508 A78-47347
Unsteady hypersonic gas flow past a thin wing of finite span
p0529 A78-49792
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673
Unsteady fluid flow in a swirl injector
p0581 A78-50781
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
On the nonstationary boundary layer with self-induced pressure at transonic external stream velocities
p0591 A78-52043
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044
A cascade in unsteady flow
[AD-A045319] p0091 N78-12381
Calculations of some unsteady transonic flows about the NACA 64A006 and 64A010 airfoils
[AD-A046178] p0137 N78-13999
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
Unsteady pressure distribution measurements at two trapezoidal wings with unit aspect ratio
p0205 N78-17020
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029
Circulation control airfoil study --- wind tunnel stability tests
[AD-A048677] p0237 N78-18005
Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller
[DLR-FB-77-32] p0245 N78-18073
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
Some unsteady separation problems for slender bodies
p0249 N78-18383
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Unsteady transonic flow computations
[AD-A049188] p0254 N78-19068
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079
Unsteady aerodynamics --- conference emphasizing numerical analysis of three dimensional flows
[AGARD-CP-227] p0345 N78-22033
Calculation of unsteady airloads on oscillating three-dimensional wings and bodies
p0346 N78-22038
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
Features of unsteady flows over airfoils
p0346 N78-22054
Dynamic stall of an oscillating airfoil
p0346 N78-22055
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
Numerical study of laminar unsteady flow over airfoils
p0358 N78-23049
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
Airframe response to separated flow
p0438 N78-26116
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118

Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
Some unsteady separation problems for slender bodies
p0493 N78-28405
Structure of turbulence in complex flows --- effects of unsteadiness and three dimensionality
p0494 N78-28407
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
Linearized supersonic unsteady flow in cascades
[ARC-R/M-3811] p0545 N78-30065
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104
Investigations on unsteady pressure distribution measurements in rotating systems
[DLR-FB-77-43] p0566 N78-31135
A comparative study of two computational methods for calculating unsteady transonic flows about oscillating airfoils
[AD-A056946] p0623 N78-33058

UNSTEADY STATE
Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708

UNSWEPT WINGS
NT INFINITE SPAN WINGS
NT RECTANGULAR WINGS
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques --- in the Langley V/STOL tunnel
[NASA-TP-1168] p0325 N78-21410

UPDRAFTS
U VERTICAL AIR CURRENTS

UPPER AIR
U UPPER ATMOSPHERE

UPPER ATMOSPHERE
NT MESOSPHERE
Research on various aspects of atmospheric flight
[AD-A033681] p0302 N78-20088

UPPER SURFACE BLOWN FLAPS
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
Acoustic investigation of upper surface blown flaps
p0092 N78-13005
Wind-tunnel investigation of the aerodynamic performance, steady and vibratory loads, surface temperatures and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-X-72794] p0140 N78-14031
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Upper-surface-blowing flow-turning performance
p0389 N78-24048
Results of static tests of a 1/4 scale model of the Boeing YC-14 powered-lift system
p0389 N78-24049
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Distributed upper-surface blowing concept
p0390 N78-24056
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059
USB flow characteristics related to noise generation
p0391 N78-24060
Characteristics of USB noise
p0391 N78-24061
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050

UPPER VOLTA
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-76/3] p0137 N78-14002
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta --- hull temperature, flight data, operational problems
[DLR-IB-536-77/1] p0238 N78-18012

UPWASH
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833
Investigation of VTOL upwash flows formed by two impinging jets
[AD-A047805] p0205 N78-17025
Theoretical determination of subsonic oscillatory airforce coefficients
[ARC-R/M-3804] p0359 N78-23067
New model upwind distributions and their influence on the design of gliders
[DLR-IB-151-76/12] p0488 N78-28062
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048

URBAN DEVELOPMENT
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114

URBAN PLANNING
The airport city and the future intermodal transportation system --- Book
p0336 A78-34724
Urban noise pollution. A bibliography with abstracts
[NTIS/PS-78/0686/2] p0634 N78-33634

URBAN RESEARCH
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536

URBAN TRANSPORTATION
The impact of urban operations on helicopter noise requirements
p0619 N78-32820

URETHANES
Erosion resistant coatings --- for aircraft parts
p0120 A78-19056

USA (UNITED STATES)
U UNITED STATES OF AMERICA

USER MANUALS (COMPUTER PROGRAMS)
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
F-106 scheduled maintenance study. User's manual --- computer programs
[AD-A045625] p0091 N78-13001
Stress history simulation. Volume 2: A users manual for a computer program to modify stress

history simulations --- crack propagation in fighter aircraft
[AD-A042785] p0206 N78-17044
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
NOISEMAP computer program operator manual. Addendum for version 3.4 of NOISEMAP
[AD-A049070] p0271 N78-19849
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
F100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043
Simplified input for certain aerodynamic nose configurations to the Grumman quick-geometry system. A KWIKNOSE user's manual
[AD-A051425] p0394 N78-24089
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071

USER REQUIREMENTS
VSTOL - Can Navy needs be met
[AIAA PAPER 78-322] p0185 A78-24016
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
Remarks on future computational aerodynamics requirements --- government/industry relations
p0269 N78-19785
Future requirements and roles of computers in aerodynamics
p0269 N78-19786
Computational aerodynamics requirements in conjunction with experimental facilities --- wind tunnel test data
p0269 N78-19788
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist --- computer systems design
p0269 N78-19789

UTILITY AIRCRAFT
NT BO-105 HELICOPTER
NT C-140 AIRCRAFT
NT DO-28 AIRCRAFT
NT U-2 AIRCRAFT
NT UH-1 HELICOPTER
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
The employment of helicopters in construction engineering and assembly operations in the German Democratic Republic
p0050 A78-13498
Aircraft use in weather modification
p0056 A78-14995
A new propeller for agricultural aircraft
p0327 A78-32645
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959
An economic and technical perspective of the turboprop engine in Ag-aviation
p0375 A78-37536
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033

UTILIZATION
NT COAL UTILIZATION
NT LASER APPLICATIONS
NT WASTE ENERGY UTILIZATION
NT WINDPOWER UTILIZATION

V

V BAND
U EXTREMELY HIGH FREQUENCIES
V/STOL AIRCRAFT
NT AH-64 HELICOPTER
NT BO-105 HELICOPTER
NT C-15 AIRCRAFT
NT CH-47 HELICOPTER
NT CH-62 HELICOPTER
NT FV-12A AIRCRAFT
NT H-53 HELICOPTER
NT H-54 HELICOPTER
NT HEAVY LIFT HELICOPTERS
NT HELICOPTERS
NT MILITARY HELICOPTERS
NT OH-6 HELICOPTER
NT OH-58 HELICOPTER
NT P-1127 AIRCRAFT
NT RIGID ROTOR HELICOPTERS
NT ROTARY WING AIRCRAFT
NT SE-3160 HELICOPTER
NT SH-3 HELICOPTER
NT SHORT TAKEOFF AIRCRAFT
NT TILT ROTOR AIRCRAFT
NT UH-1 HELICOPTER
NT UH-60A HELICOPTER
NT UH-61A HELICOPTER
NT VERTICAL TAKEOFF AIRCRAFT
NT X-22 AIRCRAFT
NT XV-15 AIRCRAFT
Facing up to the military V/STOL challenge
p0016 A78-13070
Toward a new V/STOL generation
p0016 A78-13071
Navy to seek design proposals for new V/STOLS
p0069 A78-15876
Advanced Harrier pushed for fleet use
p0069 A78-15877
Moving V/STOL from technology to system
p0075 A78-16693
Design considerations in formulating V/STOL lift plus lift/cruise supersonic fighter concepts
p0109 A78-17878
V/STOL presentation --- for future Navy applications
p0109 A78-17880
The aerodynamic vane control for V/STOL
p0110 A78-17895
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
Getting ready for V/STOL T&E in the 80's --- Test and Evaluation for subsonic and supersonic options
p0123 A78-19431
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Impact of engine cycle parameters on V/STOL Type A configuration and commonality
[SAE PAPER 770980] p0179 A78-23821
Sensitivity studies for several high performance VSTOL concepts
[SAE PAPER 770982] p0180 A78-23822
Development of the propulsion simulator - A test tool applicable to V/STOL configurations
[SAE PAPER 770984] p0180 A78-23823
The impact of emerging technologies on tactical V/STOL airplane design and utility
[SAE PAPER 770985] p0180 A78-23824
Development of low pressure ratio vectoring nozzles for V/STOL aircraft
[SAE PAPER 770988] p0180 A78-23825
A clutch for V/STOL
[SAE PAPER 770989] p0180 A78-23826

VSTOL - Can Navy needs be met
[AIAA PAPER 78-322] p0185 A78-24016
US Navy examining a wide range of V/STOL concepts
p0274 A78-29175
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
New trends and problem areas in automatic flight control
p0282 A78-30252
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Grumman's radio-controlled experimental air force
p0379 A78-38522
Planning and procedures for aircraft demonstrations - V/STOL aircraft
p0380 A78-38749
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
The influence of V/STOL vehicle configuration variables on vectored jet induced flow fields in ground effect
[AIAA PAPER 78-1021] p0465 A78-43555
A critical look at V/STOL technology
[AIAA PAPER 78-1526] p0481 A78-46502
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
Experimental determination of propulsion induced ground effects of typical three fan type A V/STOL configurations
[AIAA PAPER 78-1507] p0516 A78-47943
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
Studies of aerodynamic technology for VSTOL fighter/attack aircraft
[AIAA PAPER 78-1511] p0516 A78-47946
The impact of contingency power concepts on V/STOL aircraft take-off-gross-weight
[AIAA PAPER 78-926] p0519 A78-48451
The effect of thrust vectoring and attitude control concepts on the propulsion system of V/STOL aircraft
[AIAA PAPER 78-1020] p0520 A78-48481
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
Evaluation of inlet reingestion for large bypass ratio V/STOL aircraft
[AIAA PAPER 78-1079] p0521 A78-48495
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496
The U.S. Navy bets on V/STOL --- technological integration for next generation aircraft design
p0525 A78-49550
The influence of propulsion and control system concepts on design of a Navy Type A V/STOL airplane
[AIAA PAPER 78-1505] p0529 A78-49788
Ground effects testing of two, three, and four jet configurations
[AIAA PAPER 78-1510] p0529 A78-49789
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14998
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
Aerospatiale is ready to develop a convertiplane with tethering rotors
[NASA-TM-75038] p0206 N78-17042
Low speed test of a high-bypass-ratio propulsion system with an asymmetric inlet designed for a tilt-nacelle V/STOL airplane
[NASA-CR-152072] p0209 N78-17062
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
A comparison of V/STOL handling requirements with the VAK-191B
p0258 N78-19100
MIL-F-83300; view from an aircraft designer
p0258 N78-19101
V/STOL hover stability impact on hover control task
p0258 N78-19102
V/STOL flying qualities requirements in the UK --- control during short takeoff
p0258 N78-19103
Review of US Navy VSTOL handling qualities requirements
p0258 N78-19104
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
A piloted simulation of V/STOL landings aboard a non-aviation ship
p0259 N78-19106
The STO deck launch problem
p0259 N78-19107
Shipboard testing of the AV-8A Harrier
p0259 N78-19108
Analysis of the influence of the OGE/IGE transition on VAK-191B flying qualities in hover
p0259 N78-19109
Pilot centered requirements in control/display design
p0259 N78-19110
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112
Preliminary design of a flight control system for a V/STOL airplane with geared variable pitch fans
p0259 N78-19113
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
Requirements for VLA systems
p0260 N78-19118
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
NAVTOLAND and flying qualities
p0260 N78-19120
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report

[AD-A053362] p0409 N78-25098
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
Status of the Navy's vertical short takeoff and landing aircraft
[PB-277401/6] p0440 N78-26140
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118
Technical data requirements for shipboard and shorebased vertical/short takeoff and landing V/STOL aircraft
[AD-A054102] p0500 N78-29093
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
V/STOL aerodynamic technology assessment
[AD-A054797] p0607 N78-32069
Helicopter noise research at the Langley V/STOL tunnel
p0619 N78-32826
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098

VACUUM APPARATUS
The time response of an aspirating probe in gas sampling
p0001 A78-10600

VACUUM TUBE OSCILLATORS
NT CATHODE RAY TUBES
NT GAS DISCHARGE TUBES
NT MICROWAVE OSCILLATORS
NT TRAVELING WAVE TUBES

VACUUM TUBES
NT CATHODE RAY TUBES
NT GAS DISCHARGE TUBES
NT MICROWAVE OSCILLATORS
NT TRAVELING WAVE TUBES

VALIDATION
U PROVING

VALVES
NT CONTROL VALVES
NT FUEL VALVES
NT GAS VALVES
NT PRESSURE REGULATORS
NT RELIEF VALVES
The effects of cam and nozzle configurations on the performance of a circulation control rotor pneumatic valving system
[AD-A050494] p0352 N78-22103

VANES
NT GUIDE VANES
NT JET VANES
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
Effect of endwall cooling on secondary flows in turbine stator vanes
p0041 N78-11098
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080

VANS
U TRUCKS

VAPOR TRAILS
U CONTRAILS

VAPORIZING
NT EVAPORATION
NT TRANSPIRATION

VAPORS
NT WATER VAPOR

VARIABLE AREA WINGS
U TRAILING-EDGE FLAPS

VARIABLE CYCLE ENGINES
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
Integration of a variable cycle engine concept in a supersonic cruise aircraft
[AIAA PAPER 78-1049] p0466 A78-43574
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet --- Supersonic Cruise Aircraft Research
[AIAA PAPER 78-961] p0474 A78-45096
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
Advanced supersonic propulsion study, phase 4
[NASA-CR-135273] p0038 N78-11062
ENGINEL: A single rotor turbojet engine cycle match performance program
[NASA-CR-145267] p0087 N78-12089
Advanced supersonic propulsion study, phases 3 and 4 --- variable cycle engines
[NASA-CR-135236] p0097 N78-13058
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report
[AD-A053362] p0409 N78-25098
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109

VARIABLE GEOMETRY STRUCTURES
A note on adaptive-wall wind tunnels
p0002 A78-11634
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125

VARIABLE LIFT
U LIFT

VARIABLE PITCH PROPELLERS
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368
Preliminary design of a flight control system for a V/STOL airplane with geared variable pitch fans
p0259 N78-19113
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070

VARIABLE SWEEP WINGS
B-1 progress report
p0125 A78-19446
Pressure distribution on a symmetrical butterfly wing
p0415 A78-40799
Dynamics of the longitudinal motion of an airplane with a variable-geometry wing
p0523 A78-49285
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Flight-measured buffet characteristics of a supercritical wing and a conventional wing on a variable-sweep airplane
[NASA-TP-1244] p0358 N78-23056
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085

VARIABLE THRUST
Analytic construction of part-throttle GTE characteristics
p0049 A78-13170
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055

VARIANCE (STATISTICS)
NT REGRESSION ANALYSIS

VARIATIONAL PRINCIPLES
Variational principles for the transonic airfoil problem
p0285 A78-30891

Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
VARIATIONS
NT PERIODIC VARIATIONS
VCE
U VARIABLE CYCLE ENGINES
VECTOR ANALYSIS
NT VORTICITY
VECTOR CONTROL
U DIRECTIONAL CONTROL
VECTOR SPACES
NT CANONICAL FORMS
NT EIGENVALUES
NT EIGENVECTORS
NT MATRICES (MATHEMATICS)
NT STIFFNESS MATRIX
NT VECTORS (MATHEMATICS)
NT VORTICITY
VECTORS (MATHEMATICS)
NT EIGENVECTORS
NT VORTICITY
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
Control system design using vector-valued performance criteria with application to the control rate reduction in parameter insensitive control systems
[DLR-FB-77-55] p0565 N78-31125
VEHICLE WHEELS
Aircraft takeoff from dirt airstrips
p0293 A78-32273
Rolling resistance of aircraft wheels in dry snow
[VTI-128] p0140 N78-14041
A perturbation method for predicting amplitudes of nonlinear wheel shimmy
p0325 N78-21464
VEHICLES
Electrical systems (vehicles and weapon subsystems)
[AD-A045343] p0090 N78-12335
VEHICULAR TRACKS
Some applications of a test track for aerodynamic testing
[AIAA PAPER 78-167] p0160 A78-20719
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
VELOCITY
NT ACOUSTIC VELOCITY
NT AIRSPEED
NT ANGULAR VELOCITY
NT CRITICAL VELOCITY
NT EXHAUST VELOCITY
NT FLOW VELOCITY
NT GROUND SPEED
NT HIGH SPEED
NT HYPERSONIC SPEED
NT LANDING SPEED
NT LOW SPEED
NT ROTOR SPEED
NT SUBSONIC SPEED
NT SUPERSONIC SPEEDS
NT TIP SPEED
NT TRANSONIC SPEED
NT WIND VELOCITY
A brief survey of rotary wing induced-velocity theory
[NASA-TM-78741] p0450 N78-27085
VELOCITY DISTRIBUTION
Some aspects of the problem of flights in ascent
p0119 A78-19041
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
The mean velocity field of unsteady subsonic air jets
p0374 A78-37417
Aircraft operating environments around high speed ships --- RPV feasibility for hydrofoil ships
[AIAA PAPER 78-1184] p0422 A78-41877
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609
Experiments on the laminar flow in a rectangular streamwise corner
p0600 A78-53765
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
An empirical model for inverted-velocity-profile jet noise prediction
[NASA-TM-73838] p0098 N78-13061
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392
VELOCITY ERRORS
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
VELOCITY FIELDS
U VELOCITY DISTRIBUTION
VELOCITY MEASUREMENT
NT WIND VELOCITY MEASUREMENT
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
A new analysis method for determination of FAA stall speed
p0124 A78-19440
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Flight measurements of the wing tip vortex
p0449 N78-27074
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711
The YF-12 gust velocity measuring system
p0605 N78-32061
VELOCITY PROFILES
U VELOCITY DISTRIBUTION
VENTILATION
Mixed ventilated foils --- design for immersed hydrofoils
p0286 A78-31127
The attachment of a ventilated plane jet to an inclined plane wall
p0600 A78-53764
VERIFICATION (PROVING)
U PROVING
VERTICAL AIR CURRENTS
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
VERTICAL DISTRIBUTION
Vertical fog classifications and slant/runway visual range ratios
p0056 A78-14997
VERTICAL FINS
U FINS
VERTICAL FLIGHT
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
VERTICAL LANDING
Helicopter response in gusty winds about a building
p0055 A78-14954

The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
The XBQM-108A vertical attitude takeoff and landing vehicle
[AD-A044754] p0085 N78-12074
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084

VERTICAL MOTION
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833

VERTICAL STABILIZERS
U STABILIZERS (FLUID DYNAMICS)

VERTICAL TAILS
U STABILIZERS (FLUID DYNAMICS)
U TAIL ASSEMBLIES

VERTICAL TAKEOFF
The impact of contingency power concepts on V/STOL aircraft take-off-gross-weight
[AIAA PAPER 78-926] p0519 A78-48451
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084

VERTICAL TAKEOFF AIRCRAFT
NT X-22 AIRCRAFT
Tilt-proprotor perspective --- VTOL aircraft characteristics and development
p0075 A78-16694
Lift/cruise fan VTOL aircraft
p0076 A78-16695
How good is jet lift VTOL technology
p0076 A78-16696
Preventing zero-growth air transportation
p0107 A78-17569
The prediction of the performance of low pressure-ratio thrust-augmenter ejectors
[AIAA PAPER 78-145] p0159 A78-20704
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
VALT parameter identification flight test --- VTOL Approach and Landing Technology
p0480 A78-45439
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
VTOL aircraft dynamics --- Russian book
p0598 A78-53428
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
The XBQM-108A vertical attitude takeoff and landing vehicle
[AD-A044754] p0085 N78-12074
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
Study of the application of an implicit model-following flight controller to lift-fan VTOL aircraft
[NASA-TP-1040] p0199 N78-16063
Investigation of VTOL upwash flows formed by two impinging jets
[AD-A047805] p0205 N78-17025
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
The NAE airborne V/STOL simulator
p0263 N78-19145
Viscous flow simulations in VTOL aerodynamics --- finite difference technique
p0269 N78-19791
The feasibility of the jet-flap rotor as a lift generator for vertical takeoff and landing aircraft
[AD-A050214] p0307 N78-20125
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
VTOL performance estimation for jet lift aircraft
p0435 N78-26082
Comparison of estimated and flight data for rolling take-off and transition of a VTOL aircraft
p0435 N78-26083
Wind-tunnel testing of VTOL and STOL aircraft
[NASA-TM-78750] p0543 N78-30040
Strapdown system redundancy management flight demonstration --- vertical takeoff and landing aircraft
[NASA-CR-145356] p0608 N78-32079

VERTICAL TAKEOFF AND LANDING
U VERTICAL LANDING
U VERTICAL TAKEOFF

VERTOL MILITARY HELICOPTERS
U BOEING AIRCRAFT

VERY HIGH FREQUENCIES
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325

VERY HIGH FREQUENCY RADIO EQUIPMENT
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
EMC analysis of the proposed AEROSAT VHF subsystem with current inband communications systems. Volume 2: Worldwide
[AD-A043904] p0090 N78-12281

VFR (RULES)
U VISUAL FLIGHT RULES

VHF OMNIRANGE NAVIGATION
Experience with the VOR navigation system in the German Democratic Republic. IV
p0051 A78-13502
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914
Calculating VOR/DME holding procedures --- for aircraft approach
p0114 A78-18503
New model VOR/DME
p0373 A78-37246
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083

VIBRATION
NT BENDING VIBRATION
NT COMBUSTION VIBRATION
NT FLUTTER
NT FORCED VIBRATION
NT FREE VIBRATION
NT LINEAR VIBRATION
NT PANEL FLUTTER
NT RANDOM VIBRATION
NT RESONANT VIBRATION
NT SELF INDUCED VIBRATION

NT STRUCTURAL VIBRATION
NT SUPERSONIC FLUTTER
NT TORSIONAL VIBRATION
NT TRANSONIC FLUTTER
Vibrations of a helicopter rotor blade using finite element unconstrained variational formulations
[AD-A052670] p0397 N78-24125
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
VIBRATION DAMPERS
U VIBRATION ISOLATORS
VIBRATION DAMPING
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
On the application of dual-phase damping to landing gears
p0123 A78-19405
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
On sound transmission into a heavily-damped cylinder --- aircraft noise in fuselage
p0285 A78-31019
An example of additive damping as a cost savings alternative to redesign --- turbofan engine inlet development
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
Ride technology applications to large passenger aircraft
p0331 A78-33443
Vibration in helicopters
p0331 A78-33444
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
Helicopter rotor vibration isolation
p0524 A78-49399
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Wind tunnel study of an active flutter suppression system --- wing with external tank
p0046 N78-11974
Considerations on wing stores flutter: Asymmetry, flutter suppression
[AGARD-R-668] p0565 N78-31126
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128
VIBRATION EFFECTS
Vibration control of optical packages in aircraft
p0063 A78-15594
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298
A synthesis of the effects of noise on structures --- aircraft structural fatigue
p0121 A78-19078
VIBRATION ISOLATORS
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
Squeeze film damper characteristics for gas turbine engines
[ASME PAPER 77-DET-23] p0226 A78-26796
Flight evaluation of helicopter rotor isolation system
p0331 A78-33445
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
Helicopter rotor vibration isolation
p0524 A78-49399
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 1: Summary report
[AD-A051318] p0396 N78-24118
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 2: Detailed report
[AD-A051319] p0396 N78-24119
VIBRATION MEASUREMENT
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
Captive carriage vibration of air-to-air missiles on fighter aircraft --- F-15 flight measurements
p0587 A78-51470
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
LACV-30 auxiliary power unit investigation
[AD-A053566] p0492 N78-28277
VIBRATION MODE
Studies to gain insight into the complexities of blade vibration phenomena
p0058 A78-15175
The characteristics, prediction and test analysis of supersonic flutter in turbofan engines
p0058 A78-15176
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
Continuation and direct solution of the flutter equation
p0221 A78-25703
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
VIBRATION PROTECTION
U VIBRATION ISOLATORS
VIBRATION SIMULATORS
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
VIBRATION TESTING MACHINES
U VIBRATION SIMULATORS
VIBRATION TESTS
NT DAMPING TESTS
Investigation of turbine blade endurance during thermal cycling and vibration in a gas stream
p0001 A78-10267
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
New methods for flight vibration studies --- using Fourier analysis
[DGLR PAPER 77-050] p0191 A78-24439
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
Practical experience in vibration testing external avionics systems
p0292 A78-32134
Captive carriage vibration of air-to-air missiles on fighter aircraft --- F-15 flight measurements
p0587 A78-51470
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B
[DLR-IB-152-77/11] p0038 N78-11058
Dynamic nondestructive testing of materials
p0444 N78-26470

Experimental determination of the rattle of simple models
[NASA-TM-78756] p0555 N78-30291
VIBRATIONAL FREQUENCIES
U VIBRATIONAL SPECTRA
VIBRATIONAL SPECTRA
Natural frequencies of a soft heavy cylindrical shell under the effect of internal pressure
p0580 A78-50717
VIBRATIONAL STRESS
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
VIBRATORY LOADS
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
VIDEO DATA
RPV video digital multiplexing system
p0063 A78-15613
VIDEO EQUIPMENT
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
VISCOELASTIC DAMPING
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
VISCOELASTIC FLOW
U VISCOELASTICITY
VISCOELASTICITY
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
VISCOSITY
NT EDDY VISCOSITY
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
VISCOUS DAMPING
NT VISCOELASTIC DAMPING
Influence of oil-squeeze-film damping on steady-state response of flexible rotor operating to supercritical speeds
[NASA-TP-1094] p0098 N78-13064
VISCOUS DRAG
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
VISCOUS FLOW
NT BOUNDARY LAYER FLOW
NT BOUNDARY LAYER SEPARATION
NT REATTACHED FLOW
NT SECONDARY FLOW
NT SEPARATED FLOW
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Hypersonic flow of a viscous gas in a nozzle
p0127 A78-19651
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
An analysis method for the viscous flow over circulation-controlled airfoils
[AIAA PAPER 78-157] p0160 A78-20710
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
An aerofoil with control surface in incompressible viscous flow
p0175 A78-23050
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies
p0186 A78-24096
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
A new method of nozzle design
p0416 A78-40839
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
The prediction of viscous effects on aerofoils in transonic flow
p0478 A78-45237
The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
Contribution to the theory of three-dimensional hypersonic viscous gas flow past blunted bodies in the presence of injection
p0580 A78-50757
Calculation of viscous flow in straight weakly divergent diffusors
p0583 A78-51158
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
The force on a small sphere in slow viscous flow
p0591 A78-52175
Calculation of viscous radiant gas flows --- hypersonic reentry
p0599 A78-53556
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
Viscous effects in aircraft trailing vortices
p0080 N78-12019
Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387
A numerical study of viscous flows around airfoils
[AD-A046084] p0137 N78-14001
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996

Viscous flow simulations in VTOL aerodynamics --- finite difference technique
p0269 N78-19791
Critical issues in viscous flow computations
p0270 N78-19792
Viscous flow simulation requirements --- of aerodynamic interest
p0270 N78-19793
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
End-wall boundary layer prediction for axial compressors
[NASA-TM-78928] p0441 N78-26144
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
Dynamic stall: An example of strong interaction between viscous and inviscid flows
[NASA-TM-75447] p0615 N78-32384
VISCOUS FLUIDS
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
Calculation of a double-thread groove seal
p0132 A78-20290
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752
VISIBILITY
NT LOW VISIBILITY
Warning and marking colours on the apron
p0072 A78-16278
Some test results concerning visibility of obstacle and hazard beacons
p0280 A78-29907
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474
Feasibility of landing at an alternate airport due to visibility conditions
p0585 A78-51341
Computing internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter low glare canopy design
[AD-A043367] p0032 N78-10873
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DLR-IB-553-75/9] p0146 N78-14895
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
VISUAL ACUITY
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
VISUAL AIDS
VASI-S - A visual landing aid
p0468 A78-43800
Circles, texture, etc. - Alternate approaches to CIG scene detail --- computer image generation for flight simulators
[AIAA 78-1578] p0579 A78-50659
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363 --- visual display training simulator devices
[AIAA 78-1580] p0579 A78-50661
Correlated data bases for the present and future --- aircrew training simulator acquisitions flexibility
[AIAA 78-1583] p0579 A78-50662
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073
VISUAL CONTROL
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
VISUAL DISPLAYS
U DISPLAY DEVICES
VISUAL FIELDS
COMPUTROL - A new technique in image generation --- advanced computerized visual environment simulator
[AIAA 78-1579] p0579 A78-50660
VISUAL FLIGHT
Soviet landing aid draws FAA scrutiny --- laser approach guidance
p0381 A78-38773
Method of calculating the landmark density of aeronautical charts
p0475 A78-45124
Visual flight simulator for the investigation of the learning process during aircraft landing
p0569 A78-50302
Requirements for VLA systems
p0260 N78-19118
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043785] p0354 N78-22117
Airline pilot scanning behavior during approaches and landing in a Boeing 737 simulator
p0432 N78-26064
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet --- low visibility regimes
[AD-A052870] p0452 N78-27103
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
VISUAL FLIGHT RULES
Airborne equipment for all weather operations
p0570 A78-50448
VISUAL OBSERVATION
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles --- German thesis
p0592 A78-52498
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DLR-IB-553-75/9] p0146 N78-14895
VISUAL PERCEPTION
NT SPACE PERCEPTION
Proceedings of the 1977 Image Conference --- simulating visual perception for flight simulators
[AD-A044582] p0090 N78-12109
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
VISUAL TASKS
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
Current problems of flight simulators for research
p0275 A78-29214
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
VISUAL TRACKING
U OPTICAL TRACKING
VISUALIZATION OF FLOW
U FLOW VISUALIZATION
VOICE COMMUNICATION
An adaptive interference cancellation system for elimination of co-located interference signals --- for ATC sites

p0227 A78-27041
Objective measurement of voice channel intelligibility
[AD-A048611] p0248 N78-18264
VOLT-AMPERE CHARACTERISTICS
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
VOLTAGE
U ELECTRIC POTENTIAL
VOLTAGE CONVERTERS (DC TO DC)
Ultra high power transformers for airborne applications
p0063 A78-15625
VON KARMAN EQUATION
Transonic swirling gas flow through a nozzle
p0170 A78-22355
VOODOO AIRCRAFT
U F-101 AIRCRAFT
VOR SYSTEMS
U VHF OMNIRANGE NAVIGATION
VORTEX BREAKDOWN
Decay and modification of trailing vortex
p0230 A78-27908
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
Unsuccessful concepts for aircraft wake vortex minimization
p0080 N78-12023
Thrust-augmented vortex attenuation
p0080 N78-12024
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
The development and use of spoilers as vortex attenuators
p0081 N78-12027
Vortex attenuation flight experiments
p0081 N78-12028
Vortex breakdown. Some observations in flight on the HP 115 aircraft
[ARC-R/M-3805] p0359 N78-23068
VORTEX COLUMNS
U VORTICES
VORTEX DISTURBANCES
U VORTICES
VORTEX FLOW
U VORTICES
VORTEX GENERATION
U VORTEX GENERATORS
VORTEX GENERATORS
The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Aerodynamic characteristics of a jet sheet vortex generator --- wind tunnel tests using thin, low aspect ratio wings
[NASA-CR-158904] p0487 N78-28054
VORTEX INJECTORS
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
VORTEX SHEETS
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
Flow past nonconical wings with separation
p0377 A78-37775
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Vortex dynamics
p0582 A78-51051
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
A distributed vortex method for computing the vortex field of a missile
[NASA-TP-1183] p0405 N78-25058
Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
Aerodynamic characteristics of a jet sheet vortex generator --- wind tunnel tests using thin, low aspect ratio wings
[NASA-CR-158904] p0487 N78-28054
Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
VORTEX STREETS
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
An investigation into the effects of shear on the flow past bluff bodies
[AIAA PAPER 78-331] p0186 A78-24025
Decay and modification of trailing vortex
p0230 A78-27908
Determination of the vortex shedding frequency of cascade with different trailing edge thickness
p0387 N78-22067
VORTEX TUBES
U VORTICES
VORTICES
NT WING TIP VORTICES
Some aspects of aircraft wake behavior near the ground
p0055 A78-14960
Flow over a wing with an attached free vortex
p0059 A78-15337
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
Flight test of combat aircraft loads and dynamic behavior encountering aircraft trailing vortices
p0125 A78-19443
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
An analysis of the aircraft trailing vortex system
[AIAA PAPER 78-312] p0185 A78-24013
The effect of fluid oscillations in a fuel line on the pressure head of a pump operating in a regime without reverse streams
p0187 A78-24259

Wake turbulence - Gone with the wind --- airport advisory system for aircraft generated vortices
p0188 A78-24347
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
Remote sensing of aircraft wake vortex movement in the airport environment --- aircraft exhaust products tracking
[APCA PAPER 77-41,4] p0220 A78-25385
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
Form of free vortices of a wing of finite span
p0335 A78-34444
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
Trailing vortices. II
p0507 A78-47172
Progress in propeller aerodynamics
p0507 A78-47173
Performance of the Vortex-Controlled Diffuser /VCD/ in an annular combustor flowpath
p0572 A78-50574
Vortex dynamics
p0582 A78-51051
Mathematical model of vortex-excited oscillations of thin, weakly damped structures
p0583 A78-51153
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
Computation of two-dimensional potential flow using elementary vortex distributions
p0590 A78-51948
The force on a small sphere in slow viscous flow
p0591 A78-52175
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima --- for aircraft operation in terminal area
[NASA-TM-78624] p0035 N78-11023
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
Inviscid modeling of aircraft trailing vortices
p0080 N78-12018
Viscous effects in aircraft trailing vortices
p0080 N78-12019
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
Application of laser velocimetry to aircraft wake-vortex measurements
p0080 N78-12021
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
Unsuccessful concepts for aircraft wake vortex minimization
p0080 N78-12023
Thrust-augmented vortex attenuation
p0080 N78-12024
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
Vortex attenuation flight experiments
p0081 N78-12028
The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
Effects of acoustic and vortical disturbances on the turbulent boundary layer at free-stream Mach number 0.5
[AD-A047921] p0205 N78-17026
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
An experimental investigation of steady asymmetric vortex shedding from a slender body of revolution at high angles of attack
[AD-A048370] p0253 N78-19062
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
Engineering and development program plan: Wake vortex
[AD-A051143] p0546 N78-30071
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048
Laser-velocimeter surveys of merging vortices in a wind tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043
Vortex advisory system simulation of Chicago O'Hare Airport
[AD-A057112] p0625 N78-33069

VORTICITY
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Use of the vorticity method in computing the aerodynamic characteristics of a thin wing in a steady supersonic flow
p0126 A78-19626
A technique for vorticity measurement in unsteady flow
[AIAA 78-801] p0295 A78-32356
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648

VORTICITY EQUATIONS
Chordwise variation of vorticity - A comparison of approximations for use in panel methods --- solution to Laplace equation for wing-body configurations
p0130 A78-20194
Transonic swirling gas flow through a nozzle
p0170 A78-22355
A new method of nozzle design
p0416 A78-40839

VORTICITY TRANSPORT HYPOTHESIS
The next approximation after boundary layer theory --- machine blade associated unsteady flow effects p0373 A78-37409
VTOL
U VERTICAL LANDING
U VERTICAL TAKEOFF
VTOL AIRCRAFT
U VERTICAL TAKEOFF AIRCRAFT
VULNERABILITY
Engine non-containment: The UK CAA view p0025 N78-10070
The Mission Trade-Off Methodology (MTOM) model. Model description [AD-A049318] p0261 N78-19125
VZ-12 AIRCRAFT
U P-1127 AIRCRAFT

W

W WINGS
U VARIABLE SWEEP WINGS
WAKES
NT AIRCRAFT WAKES
NT HELICOPTER WAKES
NT HYPERSONIC WAKES
NT LAMINAR WAKES
NT NEAR WAKES
NT PROPELLER SLIPSTREAMS
NT SUPERSONIC WAKES
NT TURBULENT WAKES
Some important physical phenomena in flows with separated turbulent boundary layers p0336 A78-34839
Section drag coefficients from pressure probe traverses of a wing wake at low speeds [AIAA PAPER 78-1479] p0514 A78-47924
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel [AIAA PAPER 78-1481] p0514 A78-47926
Distortion of a flat jet in a bounded cross-stream in the presence of a wake space p0580 A78-50779
Investigation of the jet-wake flow of a highly loaded centrifugal compressor impeller [NASA-TM-75232] p0198 N78-16051
Compressor and fan wake characteristics [NASA-CR-155766] p0235 N78-17995
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller [DLR-FB-77-32] p0245 N78-18073
Impact of FAA E and D elements: Eight airport summary [AD-A054245] p0489 N78-28077
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction [AD-A055754] p0564 N78-31118
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise --- langley anechoic noise facility p0620 N78-32827
WALL FLOW
Asymptotic theory of a wing moving at small distances from a solid wall p0133 A78-20462
An investigation of strut-wall intersection losses [AIAA PAPER 78-205] p0161 A78-20743
Experiments on supercritical flows in a self-correcting wind tunnel p0295 A78-32345
Asymptotic theory of a wing moving near a solid wall p0518 A78-48248
Three dimensional free convection flow and heat transfer along a porous vertical plate p0569 A78-50288
Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow p0582 A78-50797
Turbulent boundary layer separation on a curved wall with normal compression shock p0583 A78-51155
Three-dimensional boundary layer theory using shell geometrical concepts p0584 A78-51176
Research on unsteady turbulent boundary layers p0146 N78-14992
A study of test section configuration for shock tube testing of transonic airfoils [NASA-CR-157237] p0442 N78-26153
WALL JETS
The attachment of a ventilated plane jet to an inclined plane wall p0600 A78-53764
A computational model for three-dimensional incompressible small cross flow wall jets [AD-A048450] p0237 N78-18008
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet [NASA-CR-156121] p0300 N78-20068
WALL PRESSURE
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel p0167 A78-20973
End-wall boundary layer prediction for axial compressors [NASA-TM-78928] p0441 N78-26144
WALL TEMPERATURE
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes --- for high temperature gas turbine blades p0573 A78-50578
Near-hole region heat transfer in full-coverage film cooling --- for high temperature gas turbines p0573 A78-50579
Impingement cooling and its application to combustor design p0573 A78-50584
Analysis and design of a cooled supercritical airfoil test model --- wall temperature effect on boundary layer stability [AD-A048895] p0265 N78-19168
WALLS
NT BULKHEADS
NT NOZZLE WALLS
NT POROUS WALLS
NT THIN WALLS
NT WIND TUNNEL WALLS
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors p0320 N78-21134
WANKEL ENGINES
General aviation internal combustion engine research programs at NASA-Lewis Research Center [AIAA PAPER 78-932] p0462 A78-43505
Rotary combustion engine hydrocarbon source studies p0572 A78-50561
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application [CSIR-ME-1521] p0409 N78-25095
WARFARE
NT COMBAT
The numerical analysis of air combat engagements dominated by maneuvering performance [AD-A042483] p0023 N78-10053
WARNING DEVICES
U WARNING SYSTEMS
WARNING SIGNALS
U WARNING SYSTEMS
WARNING SYSTEMS
NT EARLY WARNING SYSTEMS
A computer controlled aircraft collision avoidance system [AIAA 77-1524] p0008 A78-12264
Requirements for an airport ground-based wind shear detection system p0056 A78-14986
A new chip detector --- component failure detection in aircraft and helicopter propulsion and transmission systems p0058 A78-15158
Warning and marking colours on the apron p0072 A78-16278
A single site passive collision avoidance system p0111 A78-17912
The FAA Wind Shear Research and Development Program - A status report p0134 A78-20480
Fire detection devices --- for aircraft cabins p0175 A78-22900

Certifying the Learjet to 51,000 feet
p0234 A78-28462
Clear air turbulence accidents
p0273 A78-28833
By accident or design --- ATC collision avoidance systems
p0334 A78-34375
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
Minimum safe performance over speed warning instruments --- for subsonic aircraft
[SAE AS 8007] p0471 A78-44683
Minimum performance standard for anticollision light systems
[SAE AS 8017] p0471 A78-44684
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
Infrared receiver performance --- airborne warning system by detection of target spectral signature
p0538 A78-49985
Preventing helicopter mid-air collisions with the proximity warning device
p0585 A78-51223
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
A comparison of integrated and conventional cockpit warning systems --- pilot performance and reaction time in man machine systems
[AD-A048670] p0239 N78-18022
Aircraft hazard detection and control utilizing an aircraft data acquisition system
[AD-A054416] p0500 N78-29092
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075

WASHOUT (RADIOACTIVITY)
U FALLOUT
WASTE ENERGY UTILIZATION
Turboexpanders for energy conservation
p0588 A78-51621
WATER
Water borne coatings
p0069 A78-15852
Equipment to neutralize aircraft fuel spills
[AD-A053862] p0460 N78-27628
WATER CONTENT
U MOISTURE CONTENT
WATER EROSION
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
WATER LANDING
NT DITCHING (LANDING)
WATER POLLUTION
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
WATER QUALITY
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536
WATER TAKEOFF AND LANDING AIRCRAFT
NT SEAPLANES
WATER TUNNELS
U HYDRAULIC TEST TUNNELS
WATER VAPOR
Transonic flow past an airfoil with condensation
[NASA-TM-75201] p0252 N78-19053

WATER VEHICLES
NT AIRCRAFT CARRIERS
NT NUCLEAR POWERED SHIPS
NT SHIPS
NT SUBMARINES
NT SURFACE EFFECT SHIPS
NT SWATH (SHIP)
NT UNDERWATER VEHICLES
WATER WAVES
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968
WAVE ATTENUATION
NT ACOUSTIC ATTENUATION
NT RADIO ATTENUATION
WAVE DIFFRACTION
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
Special problems in the determination of the radiation characteristics of antennas on aircraft and satellites with the aid of geometric diffraction theory
p0288 A78-31582
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case --- satellite and aircraft antennas
p0248 N78-18290
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
p0248 N78-18291
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case --- satellite and aircraft antennas
[ESA-TT-435] p0365 N78-23310
The integral equation method - a computational method for diffracted and scattered fields of complicated structures --- satellite and aircraft antennas
[ESA-TT-436] p0365 N78-23311
Aircraft noise propagation --- sound diffraction by wings
p0445 N78-26879
WAVE DISPERSION
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
WAVE DRAG
NT INTERFERENCE DRAG
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
WAVE EQUATIONS
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
WAVE EXCITATION
NT ACOUSTIC EXCITATION
WAVE INTERACTION
NT SHOCK WAVE INTERACTION
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
WAVE PROPAGATION
NT ACOUSTIC PROPAGATION
NT IONOSPHERIC PROPAGATION
NT SHOCK WAVE PROPAGATION
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2 --- jet aircraft noise
[NASA-CR-145262] p0404 N78-24900
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840
WAVE REFLECTION
Influence of acoustic reflectors on the discrete

component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469

WAVE RESISTANCE
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968

WAVE SCATTERING
NT ACOUSTIC SCATTERING
NT ELECTROMAGNETIC SCATTERING

WAVEGUIDES
NT OPTICAL WAVEGUIDES
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096

WEAPON SYSTEMS
NT GROUND OPERATIONAL SUPPORT SYSTEM
NT MISSILE SYSTEMS
A new concept in integrated reference systems --- avionics cost reduction
[AIAA 77-1497] p0006 A78-12245
An approach to system integration /BASIC/ --- Basic Avionic Subsystem Integration Concept for Navy weapons system program
[AIAA 77-1500] p0006 A78-12248
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
A-6E TRAM --- Target Recognition Attack Multisensor system retrofit for all-weather operations
p0051 A78-13650
A-7 ALOFT demonstration and economic analysis --- fiber optics interface for navigation and weapons delivery
p0054 A78-14939
Test pilot report on the angle rate bombing system
p0055 A78-14946
Life cycle costing, a design tool - Nuances and caveats
p0060 A78-15554
Application of near-optimal differential game feedback strategies to aircraft weapon delivery maneuvers
p0063 A78-15628
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
Stores management and data bus systems --- for F-16 aircraft
p0066 A78-15660
Shop test success is a function of the airborne system design --- F-16 weapon avionics
p0068 A78-15699
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
Radar electronic counter-countermeasures
p0222 A78-26159
Dornier LSK - Light combat aircraft with hover capability for anti-tank missions and shipboard deployment
p0336 A78-34822
The Air Combat Maneuvering Range/Instrumentation system
p0425 A78-42513
Su-19 Fencer
p0481 A78-46494
Interface design considerations for F-16 sensors and weapons
p0532 A78-49874
Software structured weapon delivery
p0532 A78-49875
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
Digital avionics support - A retrospective view of the future
p0533 A78-49903
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
Modular target acquisition and designation systems
p0536 A78-49954
F-15 avionics Built-in-Test
p0539 A78-49991
Key beam weapons tests slated --- for aircraft carrier particle beam defense against cruise missiles
p0597 A78-53238
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 1: Validation and sensitivity study
[AD-A045034] p0085 N78-12077
Electrical systems (vehicles and weapon subsystems)
[AD-A045343] p0090 N78-12335
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
Life-cycle analysis of aircraft turbine engines
[AD-A050349] p0308 N78-20135
A multi-sensor implementation for navigation, position location, position update, reconnaissance, and weapon delivery: AN/ARN-101(V)
p0315 N78-21082
The analysis of operational mission execution: An assessment of low-altitude performance, navigation accuracy and weapon delivery performance
p0433 N78-26070
Performance implications of some recent advances in weapon carriage research
p0435 N78-26081
Technical evaluation of flying weapon systems
[RAE-LIB-TRANS-1948] p0560 N78-31087
Program analyses for the S-3 weapon system improvement program
[AD-A055887] p0561 N78-31093
Ignition of a liquid fuel under high intensity radiation --- laser weapon systems
[AD-A054974] p0614 N78-32199

WEAPONS
NT GUNS (ORDNANCE)

WEAPONS DEVELOPMENT
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782

WEAR
Wear studies on aircraft brake materials
p0177 A78-23433
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320
Chevron cutting: Experiment with new runway mixtures
[NASA-TM-75448] p0616 N78-32427

WEAR INHIBITORS
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436

WEAR TESTS
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B

[DLR-IB-152-77/11] p0038 N78-11058
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials --- wear tests of gas turbine engine seals
[NASA-TM-78967] p0503 N78-29215
WEATHER
An analysis of three weather-related aircraft accidents
[NASA-CR-155363] p0239 N78-18024
WEATHER CONDITIONS
U WEATHER
WEATHER CONTROL
U WEATHER MODIFICATION
WEATHER DATA RECORDERS
Automated meteorological data from commercial aircraft via satellite: Present experience and future implications
[NASA-TM-73750] p0212 N78-17558
WEATHER FORECASTING
Aviation weather service requirements, 1980 - 1990
p0267 N78-19713
An overview of aviation weather services
p0267 N78-19715
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718
WEATHER FRONTS
U FRONTS (METEOROLOGY)
WEATHER MODIFICATION
NT CLOUD SEEDING
NT FOG DISPERSAL
NT LIGHTNING SUPPRESSION
A modern warm fog dispersal system
p0056 A78-14994
Aircraft use in weather modification
p0056 A78-14995
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
WEATHER RADAR
U METEOROLOGICAL RADAR
WEATHER STATIONS
NT AUTOMATIC WEATHER STATIONS
WEBS (MEMBRANES)
U MEMBRANES
WEBS (SUPPORTS)
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] p0244 N78-18066
WEDGE FLOW
Calculation of supercritical flow past a double wedge by Telenin's method
p0011 A78-12301
Nearly wedge-shaped antisymmetric wing in supersonic flow
p0170 A78-22080
WEDGES
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TN-D-8449] p0081 N78-12037
Asymmetric supercritical flow past a double wedge with embedded shocks
p0603 N78-32042
WEIBULL DENSITY FUNCTIONS
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
WEIGHT (MASS)
NT STRUCTURAL WEIGHT
WEIGHT ANALYSIS
Weight and cost in the design arena --- in aircraft development
p0109 A78-17884
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis --- Russian book
p0282 A78-30175
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
The impact of contingency power concepts on V/STOL aircraft take-off-gross-weight
[AIAA PAPER 78-926] p0519 A78-48451
WEIGHT REDUCTION
Ultra high power transformers for airborne applications
p0063 A78-15625
Role of titanium in aerospace applications
p0123 A78-19402
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
An evaluation of weight optimization of aircraft radioelectronic equipment
p0174 A78-22646
The weight of fuel tanks in aircraft
p0175 A78-22848
Sensitivity studies for several high performance VSTOL concepts
[SAE PAPER 770982] p0180 A78-23822
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis --- Russian book
p0282 A78-30175
Remotely piloted aircraft in the civil environment
p0283 A78-30506
Optimization of the structure of a multibulkhead large-aspect-ratio wing
p0293 A78-32275
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Aerodynamic hull design for HASPA LTA optimization --- High Altitude Superpressure Powered Aerostat Lighter Than Air
p0517 A78-48100
Evaluating avionics weight efficiency
p0518 A78-48228
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
Fiber optic development for tactical fighter applications
p0534 A78-49906
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
A data management system for weight control and design-to-cost
p0635 N78-33780
WEIGHTLESSNESS
Application of skin technology to turbine blades --- zero gravity manufacture
[AIAA PAPER 78-285] p0163 A78-20792
WELD STRENGTH
Basic fatigue curves of aircraft structures
p0283 A78-30356
WELD TESTS
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324
WELDABILITY
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324
WELDED JOINTS
Application of new joining techniques in small gas turbines
[DGLR PAPER 77-070] p0116 A78-18705
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation --- aircraft structures
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
Weldbraze airframe components
[AD-A054042] p0504 N78-29457
WELDED STRUCTURES
NT STEEL STRUCTURES
Advanced joining techniques in aerospace cell structures
p0045 N78-11392
WELDING
NT BRAZING
NT DIFFUSION WELDING
NT ELECTRON BEAM WELDING
NT FRICTION WELDING

NT GAS TUNGSTEN ARC WELDING
NT PLASMA ARC WELDING
Advanced joining techniques in aerospace cell structures
p0045 N78-11392
Process and metallurgical factors in joining superalloys and other high service temperature materials
p0046 N78-11393
Weldbraze airframe components
[AD-A054042] p0504 N78-29457
WEST GERMANY
U GERMANY
WESTLAND AIRCRAFT
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
WETNESS
U MOISTURE CONTENT
WHEEL BRAKES
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
Beryllium in aircraft brakes - A summary
p0473 A78-44736
WHEELS
NT TOROIDAL WHEELS
NT TURBINE WHEELS
NT VEHICLE WHEELS
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583
WHIRL INSTABILITY
U ROTARY STABILITY
WHIRLING TESTS
U SPIN TESTS
WIDE ANGLE LENSES
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061
WIDEBAND
U BROADBAND
WIDEBAND COMMUNICATION
Null steering antennas in the tactical scenario
p0226 A78-27037
WIND (METEOROLOGY)
NT GEOSTROPHIC WIND
NT GROUND WIND
NT GUSTS
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
WIND CIRCULATION
U ATMOSPHERIC CIRCULATION
WIND EFFECTS
Helicopter response in gusty winds about a building
p0055 A78-14954
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
Atmospheric turbulence loads on aircraft
p0175 A78-23049
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave
p0188 A78-24356
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
Atmospheric Flight Mechanics Conference, Palo Alto, Calif., August 7-9, 1978, Technical Papers
p0482 A78-46526
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
Approach guidance logic for a tilt-rotor aircraft
[AIAA 78-1295] p0542 A78-50202
WIND EROSION
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
WIND MEASUREMENT
NT WIND VELOCITY MEASUREMENT
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
Wake turbulence - Gone with the wind --- airport advisory system for aircraft generated vortices
p0188 A78-24347
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
WIND SHEAR
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
Airspeed control under wind shear conditions
p0071 A78-16185
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
The Low-Level Wind Shear Alert Program
p0187 A78-24346
The endangerment of flight safety due to wind shear
[DGLR PAPER 77-033] p0191 A78-24448
Optimal flare in presence of wind shears --- for aircraft in automatic approach
p0385 A78-39186
Improving the accuracy of HUD approaches in windshear with a new control law
[AIAA PAPER 78-1494] p0515 A78-47935
The airborne detection of low-level wind shear
[AIAA PAPER 78-1495] p0515 A78-47936
Wind shear modeling for aircraft hazard definition
[NASA-CR-155223] p0034 N78-11022
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators --- wind shear
[AD-A049277] p0257 N78-19089
Problems pilots face involving wind shear
p0268 N78-19722
Flight safety hazards by shear winds
[TUBS/SFB58/62] p0359 N78-23073
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports
[UTIAS-TN-216] p0403 N78-24755
Open-loop compensation of wind-shear effects in low level flight
p0431 N78-26052

Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
Simulation and analysis of wind shear hazard --- for aircraft landing and takeoff
[NASA-CR-157470] p0504 N78-29699
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063

WIND TUNNEL APPARATUS
NT WIND TUNNEL DRIVES
NT WIND TUNNEL NOZZLES
The aerodynamic design of blower tunnels with wide-angle diffusers
p0075 A78-16647
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
An intermittent high-Reynolds-number wind tunnel
p0130 A78-20193
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
Laser velocimeter for wind tunnel measurements
p0378 A78-37979
Resolution enhanced sound detecting apparatus --- wind tunnel apparatus for airframe noise localization
[NASA-CASE-NPO-14134-1] p0271 N78-19898

WIND TUNNEL BALANCES
U WIND TUNNEL APPARATUS

WIND TUNNEL CALIBRATION
Determination of high attitude wall corrections in a low speed wind tunnel
[AIAA 78-810] p0296 A78-32364

WIND TUNNEL DRIVES
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372
Pulse tubes for aerodynamic studies --- Russian book
p0415 A78-40298
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115

WIND TUNNEL MODELS
The AFIT remotely piloted vehicle
p0050 A78-13450
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
Remarks on design of supersonic wind tunnels
p0369 A78-36216
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
An experiment on the gust response of a transport airplane by free-flight model
p0474 A78-44835
Flow development on a supercritical wing
p0477 A78-45234
Determination of nonlinearities of dynamic stability --- of wind tunnel models
[ONERA, TP NO. 1978-52] p0479 A78-45280
Slotted test section dynamics of the NTF
[NASA-CR-155266] p0089 N78-12106
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
The use of the total-head rise across the propeller of the De Havilland Canada DHC-2 beaver as a similarity parameter to simulate power-on flight in the wind tunnel
[VTH-190] p0149 N78-15022
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
Design study of a centerplate mount for wind tunnel models
[AD-A047204] p0201 N78-16073
PHAROS, processor for harmonic analysis of the response of oscillating surfaces --- Wind tunnel models
[NLR-MP-77012-U] p0238 N78-18019
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
Analysis and design of a cooled supercritical airfoil test model --- wall temperature effect on boundary layer stability
[AD-A048895] p0265 N78-19168
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
Transonic wind tunnel tests on two-dimensional aerofoil sections. Determination of pressure distribution and drag for an aerofoil with a modified NACA 65 sub2-215 section in FFA wind tunnel S5, part 2
[FFA-TN-AU-725] p0313 N78-21062
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
The future of wind tunnel technology in Germany
[NASA-TM-75244] p0364 N78-23106
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
Prediction of aerodynamic characteristics of an aircraft from a correlation of results on a calibration model tested in various large transonic tunnels
p0436 N78-26088
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95 --- Langley Unitary Plan wind tunnel tests

[NASA-TM-78706] p0604 N78-32050
An investigation of drag reduction for tractor trailer vehicles
[NASA-CR-144877] p0633 N78-33444
WIND TUNNEL NOZZLES
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
WIND TUNNEL STABILITY TESTS
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
Investigation of a side force due to ablation --- reentry vehicle spin dynamic stability tests
p0571 A78-50457
Circulation control airfoil study --- wind tunnel stability tests
[AD-A048677] p0237 N78-18005
Measurement of the pitch damping on two AGARD B models in the FFA S4 and S5 wind tunnels
[FFA-AU-556] p0438 N78-26112
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
Nonlinear rolling motion analysis of a Canard-controlled missile configuration at angles of attack from 0 to 30 degrees in incompressible flow
[AD-A056695] p0631 N78-33132
WIND TUNNEL TESTS
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
Energy conservation in aeronautical ground testing
p0002 A78-11103
A flight path correlation technique for assessing the impact of turbulence in the atmospheric boundary layer on aircraft during the landing approach
p0055 A78-14961
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
F-16 flutter model studies with external wing stores
p0117 A78-18801
Wind tunnel experiments on a NACA 632-A215 wing profile with boundary layer control through blowing on the leading edge
p0121 A78-19075
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes --- for helicopters
p0126 A78-19639
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
An investigation of strut-wall intersection losses
[AIAA PAPER 78-205] p0161 A78-20743
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Preliminary comparison of model and prototype wakes --- building wake effects on atmospheric boundary layer
[AIAA PAPER 78-254] p0162 A78-20774
Pressure distribution over sharp-nosed cones situated at angles of attack from 0 to 10 degrees in supersonic flow
p0165 A78-20889
Approximate wind-tunnel simulation of the dynamics of a system composed of a body with a trailing cable
p0165 A78-20902
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
The low-speed air tunnel of the Institute of Hydromechanics at the University of Karlsruhe
p0176 A78-23297
An investigation into the effects of shear on the flow past bluff bodies
[AIAA PAPER 78-331] p0186 A78-24025
Profile design for an advanced-technology airfoil for general aviation aircraft
[DGLR PAPER 77-027] p0189 A78-24418
Six degrees of freedom system for store separation studies in ONERA wind-tunnels
[ONERA, TP NO. 1977-100] p0191 A78-24460
Spanwise structure of the plane turbulent wake
p0221 A78-25777
Experimental research on high lift airfoil section HL235
p0221 A78-25945
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
YAV-8B/AV-8B advanced Harrier program
p0233 A78-28455
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
Dynamic response of lift fans subject to varying backpressure --- for Surface Effect Ships
[AIAA PAPER 78-756] p0292 A78-32176
An intermittent high Reynolds number wind tunnel
[AIAA 78-766] p0293 A78-32327
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
Supersonic aerothermal testing - A new requirement
[AIAA 78-773] p0294 A78-32333
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[AIAA 78-785] p0295 A78-32343

Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
Experiments on supercritical flows in a self-correcting wind tunnel
p0295 A78-32345
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Sting effects as determined by the measurement of pitch-damping derivatives and base pressures at Mach number 3
[AIAA 78-830] p0297 A78-32381
Study of gas flows with shearing interferometers
p0327 A78-32622
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
Investigations of the transonic flow around oscillating airfoils --- Thesis
p0383 A78-38978
Pulse tubes for aerodynamic studies --- Russian book
p0415 A78-40298
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
The effect of over-the-wing nacelles on wing-body aerodynamics
[AIAA PAPER 78-1083] p0466 A78-43589
Investigation of turbine stages with radial blades
p0467 A78-43643
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
Determination of nonlinearities of dynamic stability --- of wind tunnel models
[ONERA, TP NO. 1978-52] p0479 A78-45280
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
Aerodynamic hull design for HASPA LTA optimization --- High Altitude Superpressure Powered Aerostat Lighter Than Air
p0517 A78-48100
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
Application of cryogenics in experimental aerodynamics
p0522 A78-48982
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
Interaction of turbulent boundary layers in a right-angle corner
p0588 A78-51697
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053
Calibration and test capabilities of the Langley 7- by 10- foot high speed tunnel
[NASA-TM-X-74027] p0043 N78-11121
Wind tunnel study of an active flutter suppression system --- wing with external tank
p0046 N78-11974
Effects of external stores on the aerodynamic characteristics of a 60 deg delta-wing fighter model at Mach 1.60 to 2.87 --- conducted in the Langley Unitary Plan wind tunnel
[NASA-TM-74090] p0081 N78-12033
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration --- in the Langley V/STOL tunnel
[NASA-TP-1090] p0092 N78-13014
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
Wind-tunnel investigation of the aerodynamic performance, steady and vibratory loads, surface temperatures and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-X-72794] p0140 N78-14031
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane

[VTH-LR-226] p0148 N78-15019
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TN-D-8235] p0194 N78-15999
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2 --- tabulated test results
[NASA-CR-2915] p0203 N78-16998
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
Prediction of the severity of buffeting --- wind tunnel tests
p0249 N78-18382
Test data report, low speed wind tunnel tests of a full scale lift/cruise-fan inlet, with engine, at high angles of attack
[NASA-CR-152055] p0252 N78-19049
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
Computational aerodynamics requirements in conjunction with experimental facilities --- wind tunnel test data
p0269 N78-19788
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control --- in the Langley Unitary Plan Wind Tunnel
[NASA-TP-1124] p0301 N78-20079
Comparison of measured and calculated helicopter rotor impulsive noise --- wind tunnel test data and prediction analysis techniques
[NASA-TM-78473] p0311 N78-20917
Acoustical effects of blade tip shape changes on a full scale helicopter rotor in a wind tunnel
[NASA-CR-152082] p0311 N78-20918
Comparison of aerodynamic data measured in air and Freon-12 wind-tunnel test mediums
[NASA-TM-78671] p0312 N78-21052
Low-speed aerodynamic characteristics from wind-tunnel tests of a large-scale advanced arrow-wing supersonic-cruise transport concept
[NASA-CR-145280] p0312 N78-21053
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques --- in the Langley V/STOL tunnel
[NASA-TP-1168] p0325 N78-21410
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
The future of wind tunnel technology in Germany
[NASA-TM-75244] p0364 N78-23106
High angle canard missile test in the Ames 11-foot transonic wind tunnel
[NASA-CR-2993] p0405 N78-25057
Development of techniques and correlation of results to accurately establish the lift/drag characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight (Airbus and Concorde)
p0436 N78-26093
Correlation of wind-tunnel and flight-test data for the Lockheed L-1011 Tristar airplane
p0436 N78-26094
Transonic wind tunnel tests on a NACA 0012 aerofoil
[ARL/AERO-REPT-148] p0437 N78-26095
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter model employing a strake-wing concept
[NASA-TM-74071] p0437 N78-26103
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
Development of improved 3DOF analysis capabilities in the AEDC-VKF continuous wind tunnels
[AD-A053939] p0450 N78-27088
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration --- test in the Langley high speed 7- by 10-foot tunnel
[NASA-TM-78686] p0487 N78-28052
Aerodynamic characteristics of a jet sheet vortex generator --- wind tunnel tests using thin, low aspect ratio wings
[NASA-CR-158904] p0487 N78-28054
Prediction of the severity of buffeting --- structural response to the aerodynamic excitation produced by separated flow
p0493 N78-28404
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
Wind-tunnel testing of VTOL and STOL aircraft
[NASA-TM-78750] p0543 N78-30040
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
Experimental investigation of gust response of hingeless helicopter rotors
[AD-A054752] p0552 N78-30142
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils

[AD-A055140] p0558 N78-31047
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage --- conducted in the Langley V/STOL wind tunnel
[NASA-TM-74033] p0604 N78-32049
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95 --- Langley Unitary Plan wind tunnel tests
[NASA-TM-78706] p0604 N78-32050
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control --- Lewis 10 by 10 ft supersonic wind tunnel tests
p0605 N78-32062
Wind-tunnel investigation at supersonic speeds of a canard-controlled missile with fixed and free-rolling tail fins
[NASA-TP-1316] p0606 N78-32067
M=3 turbulent boundary layer measurements at very high Reynolds numbers --- supersonic wind tunnel tests
[AD-A055952] p0607 N78-32072
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173
Helicopter noise research at the Langley V/STOL tunnel
p0619 N78-32826
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise --- langley anechoic noise facility
p0620 N78-32827
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
A study of the noise radiation from four helicopter rotor blades --- tests in Ames 40 by 20 foot wind tunnel
p0621 N78-32835
Laser-velocimeter surveys of merging vortices in a wind-tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043
WIND TUNNEL WALLS
A note on adaptive-wall wind tunnels
p0002 A78-11634
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
Tunnel interference assessment by boundary measurements
p0284 A78-30689
Experiments on supercritical flows in a self-correcting wind tunnel
p0295 A78-32345
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
Determination of high attitude wall corrections in a low speed wind tunnel
[AIAA 78-810] p0296 A78-32364
Optimum design of wind tunnel contractions
[AIAA 78-819] p0297 A78-32373
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
Induction of subsonic wind tunnels with slight perforation
p0519 A78-48250
A study of acoustic disturbances and means of suppression in ventilated transonic wind tunnel walls
[AD-A045347] p0100 N78-13080
Design and performance evaluation of slotted walls for two-dimensional wind tunnels
[NASA-TM-78648] p0247 N78-18085
Numerical design of streamlined tunnel walls for a two-dimensional transonic test
[NASA-TM-78641] p0364 N78-23105
WIND TUNNELS
NT BLOWDOWN WIND TUNNELS
NT CASCADE WIND TUNNELS
NT CRYOGENIC WIND TUNNELS
NT HOTSHOT WIND TUNNELS
NT HYPERSONIC WIND TUNNELS
NT HYPERVELOCITY WIND TUNNELS
NT LOW SPEED WIND TUNNELS
NT SHOCK TUNNELS
NT SLOTTED WIND TUNNELS
NT SUBSONIC WIND TUNNELS
NT SUPERSONIC WIND TUNNELS
NT TRANSONIC WIND TUNNELS
Calculation of the induction of wind tunnels
p0132 A78-20277
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635
Acoustical properties of materials and muffler configurations for the 80 by 120 foot wind tunnel
[NASA-CR-152065] p0030 N78-10116
The 4m x 2m industrial aerodynamics wind tunnel
[OUEL-1188/77] p0100 N78-13085
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
Review of the Air Force summer study program on the integration of wind tunnels and computers
p0270 N78-19804
Multiprocessing tradeoffs and the wind-tunnel simulation problem
p0270 N78-19805
TESTPLT: Interactive computer procedure for wind-tunnel-data management, retrieval, comparison, and plotting
[NASA-TM-78663] p0309 N78-20144
Static pressure orifice system testing and apparatus
[NASA-CASE-LAR-12269-1] p0630 N78-33123
WIND VELOCITY
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
WIND VELOCITY MEASUREMENT
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
A digital continuously updated two minute mean windspeed indicator for use at airports
p0213 N78-17598
A current weather information display system for use at airports
p0213 N78-17600
WINDING
NT FILAMENT WINDING
NT HELICAL WINDINGS
WINDMILLING
U AUTOROTATION
WINDMILLS (WINDPOWERED MACHINES)
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
WINDPOWER UTILIZATION
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552
WINDPOWERED GENERATORS
Performance-optimized horizontal-axis wind turbines

p0170 A78-22232
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
Some contributions to aerodynamic theory for vertical-axis wind turbines
p0327 A78-32534
Inviscid flow through wide-angle diffuser with actuator disk --- for wind turbine augmentation
p0597 A78-53095
WINDS ALOFT
NT GEOSTROPHIC WIND
WINDSCREENS
U WINDSHIELDS
WINDSHIELDS
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
Evaluation of windshield materials subjected to simulated supersonic flight
[AD-A049981] p0317 N78-21101
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
Damping, static, dynamic, and impact characteristics of laminated beams typical of windshield construction
[AD-A054463] p0548 N78-30093
Aircraft defogging and defrosting (transparent area)
[AD-A056976] p0626 N78-33094
WING CAMBER
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Remarks on conical supersonic wings with subsonic leading edges
p0333 A78-34016
Analysis of advanced variable camber concepts for combat aircraft
p0592 A78-52592
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration --- test in the Langley high speed 7- by 10-foot tunnel
[NASA-TM-78686] p0487 N78-28052
WING FLAPS
NT LEADING EDGE SLATS
NT TRAILING-EDGE FLAPS
The technical conception of the IL-62M. VII - Landing flap control
p0051 A78-13503
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
The flapwing, a unique fluid machine element
p0418 A78-41157
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B
[DLR-IB-152-77/11] p0038 N78-11058
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
WING FLOW METHOD TESTS
Displacement thickness distributions in transonic flows about 3-D wings
p0108 A78-17612
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
Asymptotic theory of a wing moving near a solid wall
p0518 A78-48248
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
WING LOADING
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
Strain gage calibration of a complex wing
p0071 A78-16182
The evaluation of several finite elements for the calculation of wing structures
p0119 A78-19051
A method for determining the induced resistance of wings with high aspect ratio in a subsonic regime
p0120 A78-19065
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload
p0128 A78-19693
Transmission of a concentrated force to a plate
p0129 A78-19726
Determination of pressure impulses at supersonic delta wings with incident weak shock waves
p0129 A78-19729
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
Reliable lifting surface solutions for unsteady flow
[AIAA PAPER 78-228] p0161 A78-20757
Turbulent boundary layer on a moving surface
p0163 A78-20850
Rational arrangement of the structural and load-bearing elements of the wing with allowance for certain aerodynamic requirements
p0167 A78-20984
The damage sum in fatigue of structure components
p0226 A78-26834
Experimental investigation of composite wing failure
[AIAA 78-509] p0279 A78-29809
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
Aerodynamics of the annular wing
p0379 A78-38475
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Wing design for a future airliner
p0471 A78-44619
Trailing vortices. II
p0507 A78-47172
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high

subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8474] p0299 N78-20065
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Development and flight evaluation of active controls in the L-1011 --- including wing load alleviation and stability augmentation
p0496 N78-29051
A theoretical investigation of ground effects on USB configurations
[NASA-CR-157355] p0499 N78-29086
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834

WING OSCILLATIONS
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
Flying aeroplanes in buffet
p0078 A78-17130
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
Calculation of the flow past a vibrating airfoil section in transonic gas flow
p0127 A78-19669
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
Theory of bending-torsional self-oscillations of an aircraft wing system
p0292 A78-32264
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
The flapwing, a unique fluid machine element
p0418 A78-41157
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
The stall problem
p0204 N78-17006
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029
Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
PHAROS, processor for harmonic analysis of the response of oscillating surfaces --- Wind tunnel models
[NLR-MP-77012-U] p0238 N78-18019
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
Calculation of unsteady airloads on oscillating three-dimensional wings and bodies
p0346 N78-22038
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113

WING PANELS
Experience in using high-modulus carbon fibre --- in Viggen wing panels
p0077 A78-16896
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials
p0169 A78-21971
Material development for laminar flow control wing panels
p0218 A78-25200
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
Optimization of the structure of a multibulkhead large-aspect-ratio wing
p0293 A78-32275
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029

WING PLANFORMS
NT ARROW WINGS
NT DELTA WINGS
NT INFINITE SPAN WINGS
NT SWEPT FORWARD WINGS
NT SWEPTBACK WINGS
NT TRAPEZOIDAL WINGS
NT VARIABLE SWEEP WINGS
Application of the thrust augmentation wing principle for potential military use
p0110 A78-17893
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
The computation of self-similar three-dimensional separated flows

p0127 A78-19657
Chordwise variation of vorticity - A comparison of approximations for use in panel methods --- solution to Laplace equation for wing-body configurations
p0130 A78-20194
Nearly wedge-shaped antisymmetric wing in supersonic flow
p0170 A78-22080
Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Strake-wing analysis and design
[AIAA PAPER 78-1201] p0423 A78-41891
Wing design for a future airliner
p0471 A78-44619
Lateral-aerodynamic characteristics of highly-dihedraled wings
p0523 A78-49334
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
User's guide for a modular flutter analysis software system (fast version 1.0)
[NASA-TM-78720] p0492 N78-28101
A calculator program for analyzing airloads on a wing of arbitrary planform and camber in subsonic flow
[AD-A054180] p0545 N78-30058
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088

WING PROFILES
NT WING SPAN
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
A new mathematical method for the aerodynamic smoothing of profiles
p0118 A78-19039
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
Wind tunnel experiments on a NACA 632-A215 wing profile with boundary layer control through blowing on the leading edge
p0121 A78-19075
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload
p0128 A78-19693
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
Approximate method of calculating subsonic compressible flows past a lifting wing profile
p0164 A78-20883
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Uniformly precise conformal mapping of the exterior of a circle onto the exterior of a wing section
p0174 A78-22642
Why the flexible wing. II --- for glider design
p0176 A78-23058
Design of a transonically profiled wing
[DGLR PAPER 77-026] p0189 A78-24417
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
The supersonic flow past cusped wings
p0230 A78-28056
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
An experimental and computational investigation of a swept-wing flow at subsonic speeds
[AIAA PAPER 78-1200] p0423 A78-41890
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
Supersonic flow over sharp-edged wings
p0480 A78-46091
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
Conceptual design study of power augmented ram wing in ground effect aircraft
[AIAA PAPER 78-1466] p0512 A78-47915
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
Uniformly exact conformal transformation of exterior of circle onto exterior of wing profile
p0518 A78-48224
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
Calculation of local three-dimensional supersonic fields
p0584 A78-51184
Application of hypersonic favorable aerodynamic interference concepts to supersonic aircraft
[AIAA PAPER 78-1458] p0591 A78-52042
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TN-D-8474] p0299 N78-20065
Aerodynamics of the new generation of combat aircraft with delta wings
p0549 N78-30106
Design of a transonically profiled wing
[NASA-TM-75440] p0604 N78-32052

WING ROOTS
Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints

p0077 A78-16907
WING SLATS
U LEADING EDGE SLATS
WING SLOTS
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
WING SPAN
Thick, two-dimensional wake roll-up behind a wing of finite span - Extended calculations
p0078 A78-17131
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
Form of free vortices of a wing of finite span
p0335 A78-34444
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
WING TANKS
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
WING TIP VORTICES
Decay and modification of trailing vortex
p0230 A78-27908
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
The development and use of spoilers as vortex attenuators
p0081 N78-12027
The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
Flight measurements of the wing tip vortex
p0449 N78-27074
WING TIPS
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251
Wing with fork tips as means of increasing cost effectiveness of transport aircraft
[DGLR PAPER 77-017] p0189 A78-24410
The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
Considerations in the design of tip-coupled air-transport systems
[NASA-TM-78645] p0147 N78-15001
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048
Full-scale testing of an Ogee tip rotor --- in the Langley whirl tower
p0620 N78-32830
WING-FUSELAGE STORES
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
Considerations on wing stores flutter: Asymmetry, flutter suppression
[AGARD-R-668] p0565 N78-31126
Asymmetric store flutter
p0566 N78-31127
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128
WINGED VEHICLES
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
WINGLETS
The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
Design and analysis of winglets for military aircraft, phase 2
[AD-A046152] p0140 N78-14035
The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30 --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds --- in the Langley 8 ft transonic tunnel
[NASA-TM-D-8474] p0299 N78-20065
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
Experimental results of winglets on first, second, and third generation jet transports --- to reduce drag coefficient
p0496 N78-29048

Winglet and long duct nacelle aerodynamic development for DC-10 derivatives
p0496 N78-29049
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050

WINGS
NT ARROW WINGS
NT BEARINGLESS ROTORS
NT CAMBERED WINGS
NT CARET WINGS
NT CRUCIFORM WINGS
NT DELTA WINGS
NT FIXED WINGS
NT FLEXIBLE WINGS
NT GAW-1 AIRFOIL
NT INFINITE SPAN WINGS
NT LIFTING ROTORS
NT LOW ASPECT RATIO WINGS
NT OBLIQUE WINGS
NT RECTANGULAR WINGS
NT RIGID ROTORS
NT RIGID WINGS
NT ROTARY WINGS
NT SLENDER WINGS
NT SUPERCRITICAL WINGS
NT SWEPT FORWARD WINGS
NT SWEPT WINGS
NT SWEPTBACK WINGS
NT THIN WINGS
NT TILTING ROTORS
NT TIP DRIVEN ROTORS
NT TRAPEZOIDAL WINGS
NT TWISTED WINGS
NT UNSWEPT WINGS
NT VARIABLE SWEEP WINGS
Flow over a wing with an attached free vortex
p0059 A78-15337
C-5 wing modification - Weight and design to cost status
p0110 A78-17897
Transonic integral equation formulation for lifting profiles and wings
p0113 A78-18238
A program for the interactive design of wing structures
p0120 A78-19063
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
Modeling the influence of the ground effect on the aerodynamic characteristics of a wing by means of a flat screen of finite dimensions
p0174 A78-22634
Fatigue life analysis of the L 13 /Blanik/ glider
p0283 A78-30360
Calculation of the aerodynamic characteristics of a wing moving with subsonic velocity under a slight effect of a shock wave
p0334 A78-34442
Minimum trimmed drag and optimum c.g. position --- center of gravity
p0473 A78-44831
Some nonlinear effects in stability and control of wing-in-ground effect vehicles
p0474 A78-44836
Development of low sweep, high aspect ratio wings designed for high Reynolds number
p0477 A78-45233
On the linear superposition of aerodynamic forces on wings in periodic gusts
p0510 A78-47869
Modeling ground plane influence on wing aerodynamic characteristics using a finite plane screen
p0518 A78-48216
Integral equation formulation for transonic flow past lifting wings
p0571 A78-50459
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041
A minimum inductive resistance wing near the surface of the earth
[AD-A044690] p0082 N78-12042
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044
An approximate method of calculating downwash behind a straight wing with unsteady aperiodic motion at subsonic flight speeds
[AD-A044293] p0084 N78-12069
Hydromechanical properties of an isolated wing moving above a screen
[AD-A044692] p0091 N78-12379
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
Movement of a wing with a small aspect ratio near the interface of fluids with different densities
[AD-A045921] p0145 N78-14348
Fatigue strength of joints with special fasteners, part 2
[BAE-LIB-TRANS-1920] p0145 N78-14408
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
An annular wing
[NASA-CASE-FRC-11007-1] p0253 N78-19055
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
An analytical and experimental study of the dynamic response of a semi-monocoque aircraft wing structure
p0348 N78-22072
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups

[BMFT-FB-W-77-27] p0350 N78-22085
Civil components program "Wing Section'. Preliminary design of engine mounting --- and nacelle mounting
[BMFT-FB-W-77-28] p0350 N78-22086
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
Civil components program "Wing Section'. Wing structure parameter study --- effects on wing weight
[BMFT-FB-W-77-30] p0350 N78-22088
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
Civil components program "Wing Section'. Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
Civil components program "Wing Section'. Materials selection
[BMFT-FB-W-77-37] p0351 N78-22091
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
AV-8B composite wing government/industry briefing
p0396 N78-24113
Aircraft noise propagation --- sound diffraction by wings
p0445 N78-26879
Development of advanced composite structures
p0448 N78-27062
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
Prediction of the severity of buffeting --- structural response to the aerodynamic excitation produced by separated flow
p0493 N78-28404
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
Advanced composites wing study program. Volume 1: Executive summary
[NASA-CR-145382-1] p0613 N78-32185
Advanced composites wing study program, volume 2
[NASA-CR-145382-2] p0613 N78-32186
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
Assessment of load alleviation devices installed on a power-augmented-ram wing over irregular waves
[AD-A045425] p0622 N78-33049
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
WINTER
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
WIRE
NT ELECTRIC WIRE
WIRING
Fabrication and assembly of cable strands for aircraft engines --- Russian book
p0599 A78-53432
WIRING SYSTEMS
U WIRING
WORK CAPACITY
Operator work capacity during parachutist free-fall
p0517 A78-47978
WORK HARDENING
NT STRAIN HARDENING
WORKING FLUIDS
Evaluation of a pressurized air start system for advanced army helicopters --- gas turbine engines
[AD-A051967] p0360 N78-23082
WORKLOADS (PSYCHOPHYSIOLOGY)
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Preliminary Candidate Advanced Avionics System (PCAAS) --- reduction in single pilot workload during instrument flight rules flight
[NASA-CR-152026] p0024 N78-10061
WRAPAROUND CONTACT SOLAR CELLS
U SOLAR CELLS
WRENCHES
Recess fasteners
[AD-A053221] p0443 N78-26449
WU-2 AIRCRAFT
U U-2 AIRCRAFT
WURTZITE
New materials in the Si-C-Al-O-N and related systems --- for gas turbine and high temperature applications
p0601 A78-53864

X

X BAND
U SUPERHIGH FREQUENCIES
X RAY DIFFRACTION
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
Application of X-ray diffraction stress measuring techniques --- to aircraft structures
p0443 N78-26467
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy --- jet engine compressor blades
p0444 N78-26468
X RAY FLUORESCENCE
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648
X RAY INSPECTION
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
X-22 AIRCRAFT
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
X-24 AIRCRAFT
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647

XENON LAMPS
ASD strobe light evaluation --- luminous intensity requirements for aircraft anticollision lights
[AD-A045533] p0095 N78-13036
XV-6A AIRCRAFT
U P-1127 AIRCRAFT
XV-15 AIRCRAFT
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
The promise of tilt rotor
p0508 A78-47266
Pilot evaluation of an advanced hingeless rotor XV-15 simulation
[NASA-CR-152034] p0022 N78-10046
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071

Y

YAG LASERS
Space optical communications with the Nd:YAG laser
p0285 A78-30886
YAGI ANTENNAS
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
YAK 40 AIRCRAFT
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
YAW
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
Evaluation of a circulation control tail boom for yaw control --- OH-6 helicopter
[AD-A055116] p0564 N78-31119
YAWMETERS
U ATTITUDE INDICATORS
U YAW
YC-15 AIRCRAFT
U C-15 AIRCRAFT
YC-14 AIRCRAFT
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Structural castings for aircraft - A progress report from Boeing
p0232 A78-28370
YC-14 flight test program
p0233 A78-28458
YC-14B prototype testing
p0233 A78-28459
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
Overview of powered-lift technology --- as used on the YC-14 aircraft and C-15 aircraft
p0389 N78-24047
Results of static tests of a 1/4 scale model of the Boeing YC-14 powered-lift system
p0389 N78-24049
YF-102 AIRCRAFT
U F-102 AIRCRAFT
YF-12 AIRCRAFT
Phugoid characteristics of a YF-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Mechanical characteristics of stability-bleed valves for a supersonic inlet --- for the YF-12 aircraft
[NASA-TM-X-3483] p0098 N78-13063
Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and comparison with other data
[NASA-TM-72855] p0405 N78-25055
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055
Overview of the NASA YF-12 program
p0605 N78-32056
Recent load calibrations experience with the YF-12 airplane --- thermal stresses on Delta wing
p0605 N78-32057
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface --- YF-12A ventral fins
p0605 N78-32058
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
The YF-12 gust velocity measuring system
p0605 N78-32061
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control --- Lewis 10 by 10 ft supersonic wind tunnel tests
p0605 N78-32062
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064
YF-16 AIRCRAFT
The fighter control configured vehicle /CCV/ program development and flight test summary
p0125 A78-19444
Correlation of F-16 aerodynamics and performance predictions with early flight test results
p0436 N78-26092
Investigation of a discrete C-Star transient response controller for the YF-16 at a selected flight condition
[AD-A053441] p0456 N78-27139
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089
YHU-1 HELICOPTER
U UH-1 HELICOPTER
YIELD STRENGTH
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
YIG (GARNET)
U YTTRIUM-IRON GARNET
YJ-85 ENGINE
U J-85 ENGINE
YOUNG MODULUS
U MODULUS OF ELASTICITY
YTTRIUM COMPOUNDS
NT YTTRIUM-IRON GARNET
YTTRIUM-IRON GARNET
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
YUH-1 HELICOPTER
U UH-1 HELICOPTER
YUH-60A HELICOPTER
U UH-60A HELICOPTER
YUH-61A HELICOPTER
U UH-61A HELICOPTER

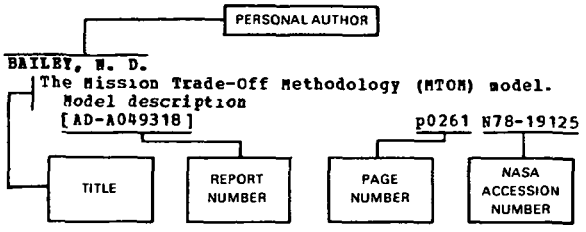
Z

ZENITH
Experimental evaluation of an array technique for zenith to horizon coverage --- aircraft to satellite communication links
p0370 A78-36380
ZERO GRAVITY
U WEIGHTLESSNESS
ZERO LIFT
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
ZINC COMPOUNDS
NT WURTZITE
ZINC SULFIDES
NT WURTZITE
ZIRCONIUM
NT ZIRCONIUM 95
ZIRCONIUM COMPOUNDS
NT ZIRCONIUM OXIDES
ZIRCONIUM ISOTOPES
NT ZIRCONIUM 95
ZIRCONIUM OXIDES
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683

Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
ZIRCONIUM 95
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062

PERSONAL AUTHOR INDEX

Typical Personal Author Index Listing



Listings in this index are arranged alphabetically by personal author The title of the document provides the user with a brief description of the subject matter The report number helps to indicate the type of document listed (e g NASA report translation NASA contractor report) The page and accession numbers are *located beneath and to the right of the title e g p0261 N78 19125 Under any* one author s name the accession numbers are arranged in sequence with the *IAA* accession numbers appearing first

A

ABBISS, J. B.
Photon correlation techniques for wind-tunnel anemometry
p0481 A78-46376

ABBOTT, J. M.
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132

ABBOTT, K. H.
TRIP steels promise high reliability hardware
[AD-A052765] p0401 N78-24348

ABBOTT, W. Y.
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037

ABEL, E.
Linear machine power requirements and system comparisons
p0585 A78-51271

ABEL, I.
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459

ABELSON, P. W.
The policy problems and economics of aircraft noise
p0122 A78-19128

ABERCROMBIE, J. M.
Flight test verification of F-15 performance predictions
p0436 N78-26090

ABERNATHY, J.
Space optical communications with the Nd:YAG laser
p0285 A78-30886

ABRAHAM, B.
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0282 A78-30259
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0411 N78-25455

ABRAMOV, Y. A.
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044

ABRAMS, C.
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251

ABRAMS, R.
B-1 progress report
p0125 A78-19446
B-1 terrain following
p0125 A78-19447
B-1 terrain following development
p0233 A78-28456
B-1 terrain-following development
p0432 N78-26061

ABRAMSON, J.
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils
[AD-A055140] p0558 N78-31047

ABUAF, N.
Flow starting times in constant-area supersonic diffusers
p0076 A78-16810

ACKER, C.
Saving raw materials or saving energy in aircraft construction
p0053 A78-14285

ADACHI, T.
Numerical analysis of flow through turbine cascade by the Modified FLIC Method
p0576 A78-50607

ADAM, P.
Application of new joining techniques in small gas turbines
[DGLR PAPER 77-070] p0116 A78-18705

ADAMS, G. A.
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305

ADAMS, G. R.
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410

ADAMS, J. C.
Computational aerodynamics requirements in conjunction with experimental facilities
p0269 N78-19788

ADAMS, J. J.
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
An approach to the determination of aircraft handling qualities using pilot transfer functions
p0356 N78-23018

ADAMS, N.
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149

ADAMS, R. J.
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145

ADAMSON, A. P.
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468

Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] p0244 N78-18066
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
ADAMSON, J. C.
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109
ADAMSON, T. C., JR.
Three-dimensional transonic shear flow in a channel
p0010 A78-12290
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
Project SQUID
[AD-A047076] p0199 N78-16056
ADDERLEY, B.
By accident or design
p0334 A78-34375
ADDIS, L.
Integrated flight trajectory control
p0061 A78-15563
ADEL, H. E.
A contractor's perception of design to life cycle cost
p0060 A78-15553
ADLER, A.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
ADLER, D.
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
ADOLPH, C. E.
Integrated test mission control - Present and future at the Air Force Flight Test Center
[AIAA PAPER 78-1461] p0512 A78-47911
AFFENS, W. A.
Electrostatic charging of JP-4 fuel on polyurethane foams
[AD-A053831] p0457 N78-27278
AFONINA, N. E.
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
AGACHEV, R. S.
A theoretical and experimental analysis of the influence of coolant discharge from perforated turbine blades on their aerodynamic behavior
p0580 A78-50777
AGGARWAL, R.
Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
AGISHEV, B. M.
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
AGNONE, A.
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
AHEARN, F. W.
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
AHLERS, R. H.
Full-scale aircraft crash tests of modified jet fuel
[AD-A043843] p0045 N78-11251
AHMED, S.
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
AHMED, S. R.
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
AHNERT, L.
Titanium and titanium alloys in aircraft maintenance and repair. I
p0378 A78-38246
Titanium and titanium alloys for the maintenance and repair of aircraft. II
p0469 A78-44200
AHRENSDORF, K.
Tests on details and components
p0242 N78-18050
AHUJA, K. K.
Prospects for supersonic jet noise suppression
p0329 A78-33089
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
AIBA, T.
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594
AICHER, W.
Analysis and synthesis of operational loads
[ISD-193] p0310 N78-20551
AIKEN, E. W.
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
AIKEN, W. S.
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
AIRES, R. H.
Color displays for airborne weather radar
p0372 A78-36980
AIZAWA, K.
Experimental verification of a blade cooling system and comparison with design calculation
p0573 A78-50583
AKAI, T. J.
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
AKHMETOV, Y. M.
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
AKSENOV, O. M.
A superelement technique for designing helicopter fuselages
p0174 A78-22627
Superelement method for helicopter fuselage analysis
p0517 A78-48209
Superelement method of designing a helicopter fuselage
p0206 N78-17043
ALAG, G.
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
ALANSKY, I. B.
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Limitations of the UTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
ALBANESE, V. J.
A high-power switching network for a dual-mode antenna
p0383 A78-38844
ALBANO, L. P.
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
ALBAREL, G.
The ABEILLE electronic scanning antenna
p0338 A78-35050
ALBERY, W. B.
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363
[AIAA 78-1580] p0579 A78-50661
ALBRECHT, R.
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
ALBRIGHT, A. J.
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
ALDERS, G. J.
Clearance of new stores for military aircraft - An overview of the techniques used
p0074 A78-16597
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by

flight tests
[NLR-MP-76023-U] p0248 N78-18289
ALEKSEEV, V. N.
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
ALESZKA, J. C.
Low energy impact behavior of composite panels
p0339 A78-35397
ALEXANDER, H. R.
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
ALEXANDER, J. D.
Design philosophy for engine forgings
p0509 A78-47452
ALFARO-BOU, E.
Light airplane crash tests at impact velocities of 13 and 27 m/sec
[NASA-TP-1042] p0020 N78-10034
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494
ALFORD, W. J., JR.
Advanced aerodynamics and active controls technology
p0496 N78-29047
ALIFANOV, O. M.
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
ALLAN, R. D.
Advanced supersonic propulsion study, phases 3 and 4
[NASA-CR-135236] p0097 N78-13058
ALLEN, J. L.
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
ALLISON, D. O.
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
ALLISON, B. L.
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
ALTHOF, W.
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints
[DLR-FB-77-63] p0567 N78-31251
ALTIS, H. D.
Fighter superiority by design
p0549 N78-30105
ALTMAN, S. P.
The Air Combat Maneuvering Range/Instrumentation system
p0425 A78-42513
ALTSHULER, E. E.
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles
p0592 A78-52360
ALTSTATT, M. C.
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
ALWANG, J. R.
Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114
ALYEA, F. N.
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
ALZIARYDEROQUEFORT, R.
Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
ALZNER, E.
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
AMATO, R. A.
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
AMBLARD, P.
Energy savings - The viewpoint of an aircraft manufacturer
p0003 A78-12031
Energy savings. An aircraft constructor's viewpoint
[AAAF-NT-77-24] p0397 N78-24127
AMER, K. B.
Combined military and commercial application of light helicopters
p0262 N78-19136
AMIET, R. K.
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
Noise due to rotor-turbulence interaction
p0619 N78-32823
AMIJIMA, S.
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
AMIRIANTS, G. A.
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
AMMER, R. C.
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071
AMODEO, F. A.
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
AMOS, A. K.
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
AMOS, W.
Program analyses for the S-3 weapon system improvement program
[AD-A055887] p0561 N78-31093
ANANOV, G. G.
Experimental study of the induced interaction of lifting propellers, positioned according to transverse and longitudinal schemes
p0126 A78-19639
ANDERJASKA, A. E.
Application of composites on civil aircraft
p0218 A78-25199
ANDERS, G.
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
ANDERS, H.
From analog to digital control systems - Improved performance by means of advanced technology
[DGLR PAPER 77-036] p0190 A78-24426
ANDERS, J. B.
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
ANDERS, K.-P.
Flowfield and pressure field of a model propeller
p0191 A78-24451
ANDERSEN, E. R. D.
The division of air transport markets between carriers - Local service operations
p0284 A78-30697
ANDERSON, D. N.
Emissions control for ground power gas turbines
p0039 N78-11072
ANDERSON, E. C.
Numerical design of streamlined tunnel walls for a two-dimensional transonic test
[NASA-TM-78641] p0364 N78-23105
ANDERSON, G. M.
Application of near-optimal differential game feedback strategies to aircraft weapon delivery maneuvers
p0063 A78-15628
ANDERSON, J. A.
Airborne sampling system for plume monitoring

p0418 A78-41280
ANDERSON, J. M.
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
ANDERSON, S. B.
Toward a new V/STOL generation
p0016 A78-13071
How good is jet lift VTOL technology
p0076 A78-16696
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
A comparison of V/STOL handling requirements with the VAK-191B
p0258 N78-19100
ANDERSON, V. G.
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235
ANDERSSON, L.
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
ANDERTON, G. L.
The design process
[AIAA PAPER 78-1483] p0514 A78-47928
ANDO, S.
Aerodynamics of slender lifting surface in accelerated flight
p0416 A78-40836
ANDRE, W. L.
LOGMOD - The fault-isolator
p0523 A78-49239
ANDREEV, V. K.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
ANDRESS, D. E.
Analytical study of thermal barrier coated first-stage blades in an F100 engine
[NASA-CR-135359] p0208 N78-17058
ANDREW, L. V.
Flutter tests of the mated 747 Shuttle Carrier Aircraft-Orbiter
[SAE PAPER 770971] p0179 A78-23816
ANDREWS, D. G.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
ANDREWS, D. W.
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
ANDREWS, E. H., JR.
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
ANDREWS, G. A.
Evaluation of airborne radar Doppler processors
p0374 A78-37477
ANDREWS, H.
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
ANDREWS, J. W.
A relative motion analysis of horizontal collision avoidance
p0387 A78-39674
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
ANDRIES, J.
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
ANDRISANI, D., II
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
ANDRONOV, A. M.
Mathematical planning and bulk service methods of civil aviation
p0015 A78-13000
ANGELI, J. W.
Laboratory studies of lean combustion
p0040 N78-11079
ANGELINI, J.-J.
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
ANISIMOV, S. A.
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
ANIUTIN, A. N.
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
ANNIS, C. G., JR.
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
ANTOINE, A. C.
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
Jet fuels from synthetic crudes
p0461 A78-43415
Alternative fuels
p0040 N78-11074
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
[NASA-TM-73829] p0101 N78-13233
ANTONA, E.
Critical review of various structural safety concepts taking into account NDI methods
p0443 N78-26462
ANTONOV, A. N.
Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469
Calculating the interaction of a turbulent near wake behind a step and a supersonic jet
p0230 A78-28057
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
Calculation of interaction of a turbulent near-wake behind a step with a supersonic jet
p0480 A78-46092
Influence of rarefaction and compression waves on base pressure
p0600 A78-53781
ANTONOV, A. P.
Current and scattering field of a long short-circuited receiving vibrator
p0339 A78-35467
ANTONOVA, A. M.
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309
AONO, H.
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
APANASENKO, A. I.
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
APARINOV, V. A.
Calculation of nonlinear aerodynamic characteristics of wing of complex planform allowing for nose vortex sheet
p0170 A78-22359
APPEL, J.
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
APTE, Y. S.
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
ARAVAMUDAN, K. S.
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Prediction and reduction of rotor broadband noise
p0619 N78-32821
Wind tunnel investigations of model rotor noise at low tip speeds

p0620 N78-32828
ARBOCZ, J.
On the design of aerospace shell structures
p0075 A78-16600
ARCENEAUX, R. J.
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070
ARCHBALD, R.
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
ARCHDEACON, J. L.
Real-time digitally driven graphic-display systems in aircraft simulations
p0069 A78-15707
ARCONE, S. A.
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327
ARDEMA, M. D.
Feasibility of modern airships - Preliminary assessment
p0050 A78-13416
Comments on 'Feasibility study of a hybrid airship operating in ground effect'
p0188 A78-24367
ARENA, L.
Technical-analytical assistance now even in the field
p0119 A78-19053
ARENTS, D. M.
A technique for monitoring flight-test envelope expansion
[AD-A051163] p0361 N78-23083
ARGUE, G. H.
Transport Canada airfield pavement load evaluation
p0526 A78-49678
ARGYRIS, J. H.
Analysis and synthesis of operational loads
[ISD-193] p0310 N78-20551
ARIANO, J.
Approaches to combat damage repair
p0491 N78-28089
ARKHIPEV, I.
The technical conception of the Il-62M. VII - Landing flap control
p0051 A78-13503
ARLING, S. D.
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
ARMAND, C.
ONERA aerodynamic research work on helicopters
p0264 N78-19148
ARMSTRONG, R. S.
A root locus property of the extended Bass algorithm
p0053 A78-14349
ARNDT, R. E. A.
Azimuthal decomposition of the power spectral density of jet noise
p0375 A78-37532
On an acoustic field generated by subsonic jet at low Reynolds numbers
[NASA-CR-156182] p0356 N78-22858
ARNOLD, J. M.
Active controls technology to maximize structural efficiency
p0497 N78-29053
ARONSON, R. B.
Return of the propeller
p0220 A78-25516
ARSON, L. D.
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
ARTEMOV, O. A.
Approximate dynamic model of a turbojet engine
[NASA-TM-75263] p0264 N78-19159
ARULP, C. L.
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
ARUTIUNIAN, A. A.
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
ARY, A.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
ASHILL, P. R.
An experimental investigation of the drag of thick supercritical aerofoils - A progress report
p0478 A78-45243
ASHLEY, H.
Some contributions to aerodynamic theory for vertical-axis wind turbines
p0327 A78-32534
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
ASHLEY, M.
A camera system for small format aerial photography
p0337 A78-34873
ASK, H. R.
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
ASKINS, D. R.
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
ASLANOV, S. K.
Theory of two frequency ranges of unstable oscillations of turbulent combustion in a jet-engine chamber. I - Formulation of the stability problem, the characteristic equation
p0187 A78-24253
Theory on the two-frequency ranges for the unsteady fluctuations of the turbulent combustion process in a jet-engine combustion chamber. II - Analysis of the characteristic equation, comparison with the experiment
p0580 A78-50778
ASPINALL, J. W.
Solid-state displays for fuel management systems
p0510 A78-47900
ASSARABOWSKI, R. J.
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
ASTON, M. W.
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
ATASSI, H.
Effect of blade loading and thickness on the aerodynamics of oscillating cascades
[AIAA PAPER 78-227] p0161 A78-20756
ATHANI, V. V.
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
ATHANS, M.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
ATLURI, S. N.
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
ATTA, E. H.
Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
AUDBY, R.
Static and dynamic analysis of helicopter structures with the finite element method
p0114 A78-18426
AUER, H.
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
AUERBACH, I.
Influence of nosetip shape on boundary layer transition in arc heated jets
[AIAA PAPER 78-235] p0161 A78-20759
AULT, G. M.
Progress in advanced high temperature turbine

materials, coatings, and technology
p0216 A78-24910
AURORA, B.
The U.S. Navy bets on V/STOL
p0525 A78-49550
AUSMAN, J. S.
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
AUSTIN, G. F.
Test procedure analysis and recommendations for supersonic transport aircraft emission measurement
[PB-270864/2] p0102 N78-13634
AUTRY, R. G.
Fiber optic development for tactical fighter applications
p0534 A78-49906
AVDEEV, V. B.
The effect of angle of attack on the aerodamping of wing-profile vibrations
p0187 A78-24252
AVERILL, G. L.
An approach to system integration /BASIC/
[AIAA 77-1500] p0006 A78-12248
AVRAM, P.
A comparison of the performances of centrifugal compressors with the same impeller and different radial inducers
[ONERA, TP NO. 1978-42] p0479 A78-45282
AVRAMCHENKO, R. F.
Optimum schedule for replacement of aircraft system parts under incomplete information on their reliability
p0164 A78-20879
AWANO, S.
Thermodynamical performances of closed-cycle gas-turbine
p0575 A78-50605
AWEHLA, F.
Drag measurement in transonic wind tunnels
p0435 N78-26080
AXTELL, C.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
AYERS, F. T.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
AYRES, R. M.
The aerodynamic behaviour of fully inflated parachutes
p0275 A78-29215
AZUMA, A.
Improved methods for calculating the thickness noise
p0620 N78-32832

B

BAARSPUL, M.
The generation of motion cues on a six-degrees-of-freedom motion system
[VTH-LR-248] p0143 N78-14062
BABENKO, IU. I.
Unsteady heat transfer from a cylinder with radial injection
p0384 A78-39042
BABENKO, Z. Y.
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
BABIAK, N. J.
Digital avionics support - A retrospective view of the future
p0533 A78-49903
BABISTER, A. W.
Static and dynamic stability
p0332 A78-33588
BABUSHKIN, A. I.
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
BACHLE, C. F.
Lightweight, low compression aircraft diesel engine
[NASA-CR-135300] p0325 N78-21471
BACK, L. H.
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743
BACKHUS, D. R.
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
BAERST, C. F.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
BAGUSHCHENKO, L. L.
Optimal data processing for the Decca radio navigation system
p0475 A78-45119
BAGWELL, D. O.
Evaluation of a lip-seal hydraulic fitting for the F-14 aircraft
[AD-A051159] p0396 N78-24120
BAGWELL, J. W.
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283
BAHR, D. W.
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
Augmentor emissions reduction technology program
[NASA-CR-135215] p0097 N78-13057
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
BAHR, J.
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
BAILEY, C. D.
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
BAILEY, N. D.
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125
BAILEY, R. O.
Development of the propulsion simulator - A test tool applicable to V/STOL configurations
[SAE PAPER 770984] p0180 A78-23823
BAILEY, V. P.
Status report on the Advancing Blade Concept /ABC/ technology demonstrator program
[SAE PAPER 770954] p0179 A78-23805
BAILLIE, I. L. G.
Design philosophy for airframes
p0509 A78-47453
BAIRD, G. T.
Proposed load evaluation system for U.S. Air Force
p0526 A78-49677
BAISDEN, D. W.
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
BAITIS, A. E.
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
BAKER, A. A.
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
BAKER, A. J.
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
Finite element concepts in computational aerodynamics
p0270 N78-19801

BAKER, L. C.
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
BAKER, M. D.
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
BAKER, R. E.
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
BAKER, W. B., JR.
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
BAKER, W. M.
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
BAKHOV, O. P.
The helicopter as a control object
p0276 A78-29401
BALAKRISHNA, S.
One axis artificial feel system
p0224 A78-26488
BALAKRISHNAN, A. V.
Active control of airfoils in unsteady aerodynamics
p0341 A78-35786
BALANI, L. D.
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
BALASUBRAMANYA, H. M.
Transient speed response of a gas turbine
p0122 A78-19229
BALIS-CREMA, L.
Air traffic control in the terminal area - Use of a simulation technique for the definition of an operative model
p0527 A78-49733
BALL, J. C.
The feasibility of the jet-flap rotor as a lift generator for vertical takeoff and landing aircraft
[AD-A050214] p0307 N78-20125
BALL, J. N.
Rolling tail design and behavior as affected by actuator hinge moment limits
[AIAA PAPER 78-1500] p0515 A78-47940
BALLAL, D. R.
Combustion performance of gas turbine combustors burning alternative fuels
[AIAA PAPER 78-1000] p0465 A78-43547
Ignition of liquid fuel sprays at subatmospheric pressures
p0470 A78-44268
BALLHAUS, W. F.
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Conservative implicit schemes for the full potential equation applied to transonic flows
[NASA-TM-78469] p0271 N78-19868
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
BALMER, R. J.
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
BALQUET, R. J.
Some specific hydrodynamic and aerodynamic problems of surface-effect ships with sidewalls
p0286 A78-31126
BANERJEE, D.
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
BANGHAM, M. J.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
BANIA, P. J.
Fatigue crack propagation of titanium alloys under dwell-time conditions
p0387 A78-39596
BANKHEAD, H. R.
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
BANNER, R. D.
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
BANSAL, P. N.
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
BARACK, W. M.
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101
BARAN, H. A.
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
BARANOV, N. I.
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
BARANTSEV, R. G.
Local method in rarefied gas aerodynamics
p0380 A78-38726
BARBER, E. A.
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
BARBER, G. W.
Compatibility testing and integration of DAIS multiplex bus equipments
p0064 A78-15638
BARBER, M. R.
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
Vortex attenuation flight experiments
p0081 N78-12028
BARBER, T. J.
An investigation of strut-wall intersection losses
[AIAA PAPER 78-205] p0161 A78-20743
BARBERO, S.
A new mathematical method for the aerodynamic smoothing of profiles
p0118 A78-19039
BARCA, F.
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278
BARCHE, J.
New structuralization and work of current interest in the research area of fluid mechanics
p0337 A78-34941
BARCLAY, W. H.
Experiments on the laminar flow in a rectangular streamwise corner
p0600 A78-53765
BARDOWICKS, H.
Mathematical model of vortex-excited oscillations of thin, weakly damped structures
p0583 A78-51153
BARFIELD, A. F.
Terrain following criteria: The need for a cannon measure
p0432 N78-26060
BARGER, R. L.
A distributed vortex method for computing the vortex field of a missile
[NASA-TP-1183] p0405 N78-25058
BARKER, J.
Ku Band linear phased array
p0003 A78-11821

BARKER, S. J.
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
BARKOV, V. N.
Laser and optical methods of monitoring in aircraft construction
p0281 A78-30123
BARNES, A. G.
Air-to-air combat simulation
p0510 A78-47868
Therdesign of a high g cockpit
p0550 N78-30118
BARNES, F. S.
Design of noninteracting flight control systems in the presence of large parameter variations
[NASA-CR-155589] p0200 N78-16064
BARNES, G. A.
Guidance and control for low level offensive aircraft: A Royal Air Force view
p0431 N78-26050
BARNETT, T.
Heavy lift helicopter flight control system. Volume 3: Automatic flight control system development and feasibility demonstration
[AD-A050059] p0324 N78-21164
BARNETTE, J. F.
Evaluation of jet 2 inch standby flight instrument system
[AD-A051798] p0361 N78-23087
BARNHART, B.
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
BARNWELL, R. W.
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
Design and performance evaluation of slotted walls for two-dimensional wind tunnels
[NASA-TM-78648] p0247 N78-18085
BARON, P. C.
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
BARRANGER, J. P.
Application of a flight-line disk crack detector to a small engine
p0027 N78-10088
In-place recalibration technique applied to a capacitance-type system for measuring rotor blade tip clearance
[NASA-TP-1110] p0352 N78-22101
BARRERE, M.
Future fuels for aviation
[ONERA, TP NO. 1977-156] p0057 A78-15021
Combustion in gas turbine engines - A review of ONERA recent works
[ONERA, TP NO. 1978-25] p0386 A78-39580
Fundamental aspects of the aerodynamics of turbojet engine combustors
[NASA-TM-75287] p0398 N78-24142
BARRETT, L. D.
Pesearch requirements to improve reliability of civil helicopters
[NASA-CR-145335] p0316 N78-21093
BARROIS, W.
Structural fatigue reliability based on test results. I
p0057 A78-15025
Reliability of fatigue-stressed structures based on experimental results. II
p0130 A78-20147
The strength of structures and the applications of the fracture mechanics
p0178 A78-23574
Stresses and displacements due to load transfer by fasteners in structural assemblies
p0178 A78-23575
BARRON, R. M.
Oscillating airfoils. I - Wedges of arbitrary thickness in supersonic and hypersonic flow
p0597 A78-53087
BARRY, J. D.
Space optical communications with the Nd:YAG laser
p0285 A78-30886
BARSBY, J. E.
Calculations of the effects of blowing from the leading edges of a cambered delta wing
[ARC-R/M-3800] p0545 N78-30064
BARSOUM, M. L.
Spanwise structure of the plane turbulent wake
p0221 A78-25777
BARTH, C. P.
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092
BARTHELEMY, J. L.
Nansen-Drift Station Project: Remote sea-ice runway construction
[AD-A054720] p0503 N78-29113
BARTLETT, D. W.
Tabulated pressure measurements of a NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2634] p0393 N78-24077
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
BARTON, C. K.
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
BARTON, J.
Using simulation to determine the transfer function of the electronic part of a control loop
p0277 A78-29584
BARTON, J. M.
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
BARTON, J. R.
Critical inspection of bearings for life extension
p0444 N78-26472
BARTOS, J. L.
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109
BARUCH, M.
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses
p0071 A78-16181
BASCOM, W. D.
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
BASOVSKAIA, A. A.
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572
BASS, S. C.
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311
BASS, V. P.
An algorithm for complex study of the aerodynamic characteristics of spacecraft
p0599 A78-53506
BASSFORD, R. S.
Moving target detector /MTD/ radar system
p0595 A78-52963
BASU, B. C.
An aerofoil with control surface in incompressible viscous flow
p0175 A78-23050
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
A mean camberline singularity method for two-dimensional steady and oscillatory aerofoils and control surfaces in inviscid incompressible flow
[ARC-CP-1391] p0545 N78-30066
Two-dimensional aerofoils and control surfaces in simple harmonic motion in incompressible inviscid flow
[ARC-CP-1392] p0545 N78-30068

BATEMAN, L. P.
The use of CRT displays in future civil transport aircraft - Some human factor and engineering implications
[AIAA 77-1517] p0010 A78-12285
BATEMAN, R. P.
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
BATES, R. E., JR.
Three degree intermediate level maintenance of Navy aeronautical materials
[AD-A052389] p0389 N78-24042
BATHIAS, C.
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics
[AAAP-NT-77-35] p0403 N78-24587
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
BATKOV, IU. P.
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400
BATURA, M. I.
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
BAUER, A. B.
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
BAUER, E.
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
BAUER, F.
Supercritical wing sections III
p0341 A78-35728
BAUER, J.
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443
BAULIN, M. N.
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
BAUM, H. R.
Ignition of a liquid fuel under high intensity radiation
[AD-A054974] p0614 N78-32199
BAUM, J. A.
Advanced turboprop propulsion system reliability and maintenance cost
[SAE PAPER 771009] p0182 A78-23841
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
BAUMANN, H.
Error analysis and simulation concerning an inertial navigation system with vehicle-fixed sensors
p0228 A78-27383
BAXA, E. G., JR.
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
BAXTER, T.
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692
BAYER, R. J.
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
BAYLEY, F. J.
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
BAZZHIN, A. P.
Calculation of the mean flow characteristics at the inlet to the air intake located under a delta wing
p0165 A78-20895
Two new correlation dependencies for parameters of flow on a plane delta wing
p0166 A78-20933
BEAL, T. R.
Guidance and control problems in semiautomatic recovery of the Aquila RPV
[AIAA 78-1272] p0540 A78-50182
BEALE, G. O.
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182
BEALE, G. O., JR.
Optimal aircraft simulator development by adaptive random search optimization
p0246 N78-18082
BEAMISH, E. A.
An optimistic view of the plane facts
p0057 A78-15086
BEAN, A.
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
BEASLEY, W. D.
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
BEATTIE, E. C.
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
BEATTY, T. D.
Investigation of a variable camber wing design
[AD-A045951] p0137 N78-14000
BEAUBIEN, L. A.
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
BEAULIEU, G.
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports
[OTIAS-TN-216] p0403 N78-24755
BEAVER, E. W.
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
BEBENIN, G. G.
Spacecraft flight control systems
p0599 A78-53434
BECHERT, D.
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
BECKER, A.
Accuracy considerations on new Microwave Landing Systems (MLS) from an operational point of view
p0315 N78-21081
BECKER, E.
Minimisation of relaxation drag
p0374 A78-37423
BECKMAN, W. R.
L-1011 flight data recording systems - Background, features, implications and benefits
[AIAA PAPER 78-1471] p0513 A78-47917
BECKWITH, I. E.
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
BEDARD, A. J., JR.
Atmospheric pressure jumps measured with arrays of sensitive pressure sensors in the vicinity of Chicago's O'Hare International Airport
[PB-277518/7] p0356 N78-22551
BEEKMAN, S. W.
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101
BEHNKE, D. L.
Evaluation of protective coatings applied under adverse conditions
p0218 A78-25194
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112

BEILMAN, J. L.
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
BEINE, R.
Critical considerations on the legal development of personal liability with attention to air transportation
p0281 A78-29944
BEKBULATOV, R. S.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
BELAIGUE, P.
Problems concerning high temperatures in small turbomachines
p0319 N78-21121
BELIK, L.
Three-dimensional and relaminarization effects in turbine blade cascades - An experimental study
p0576 A78-50608
BELINSKIY, V. G.
Movement of a tilted wing near a screen
[AD-A045920] p0144 N78-14347
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
BELL, G. D.
Airfield pavement load evaluation - An international overview
p0525 A78-49676
BELL, J. W.
A new concept in integrated reference systems
[AIAA 77-1497] p0006 A78-12245
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
BELL, W. A.
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
BELLANTONI, J.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
BELLINGER, T. P.
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943
BELLOMO, N.
The fluid dynamics of rarefied molecular flow over convex bodies - A new theory and applications
p0229 A78-27588
BELOTSERKOVSKII, S. M.
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
BELOTSERKOVSKIY, S. M.
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079
BELOUSOV, A. N.
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
BELOVA, E. M.
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309
BELTER, S. E.
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311
BEN-AVRAHAM, O.
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
BENAVENTE, J.
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
BENCZE, D. P.
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
BENDER, G. L.
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
BENEPE, D. B.
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118
BENGTSSON, K.-E.
Experience in using high-modulus carbon fibre
p0077 A78-16896
BENJEGARD, S.-O.
New airport in Gothenburg - How the noise problems have been handled
p0015 A78-12822
BENNETT, A. G., JR.
Pilot evaluation of sailplane handling qualities
[NASA-CR-2960] p0360 N78-23081
BENNETT, G.
The role of the computer in the flight testing of general aviation aircraft
[AIAA PAPER 78-1465] p0512 A78-47914
BENNETT, R. M.
User's guide for a modular flutter analysis software system (fast version 1.0)
[NASA-TM-78720] p0492 N78-28101
BENNETT, W. A.
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
BENSCH, R. R.
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
BENSINGER, C. T.
F-16 flutter model studies with external wing stores
p0117 A78-18801
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004
BENSON, D. R.
Performance methods for aircraft and missiles
p0434 N78-26075
BENSON, J. L.
Propulsion system airframe integration studies - Advanced supersonic transport
[AIAA PAPER 78-1053] p0521 A78-48488
BENSON, R. S.
Computer aided design of radial gas turbines - A method for determining the overall rotor dimensions
p0419 A78-41509
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer
p0420 A78-41512
BENSON, T. P.
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033

Airworthiness evaluation NUH-1H helicopter with global positioning system
[AD-A047971] p0242 N78-18053
BENT, R. D.
Aircraft powerplants /4th edition/
p0332 A78-33805
BEOUNES, C.
A reliable modular automatic system adapted to avionics controls: Design through successive refinements - Production
p0281 A78-30024
BERARD, A. H.
Life cost management, methodology, and case studies
[AD-A052388] p0404 N78-24999
BERDBOW, B.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
BEREZENAIA, I. V.
Current and scattering field of a long short-circuited receiving vibrator
p0339 A78-35467
BEREZIUK, A. N.
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
BERGE, K.
Spacelab hardware update
[AAS PAPER 78-005] p0599 A78-53614
BERGER, E.
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
BERGER, J.
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight (Airbus and Concorde)
p0436 N78-26093
BERGER, R. B.
B-1 EMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092
BERGER, R. L.
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
BERJAL, H.
Experimental testing of flight control head up displays
[NASA-TM-75205] p0208 N78-17053
BERKOVITS, A.
A computer-controlled system for fatigue testing under simulated service loading
p0420 A78-41519
BERKOVSKIY, B. S.
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006
BERKSTRESSER, B. K.
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
BERMAN, H.
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
BERNARD, H.
The Turboclair process
p0571 A78-50449
BERNARDINI, G.
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
BERNSTEIN, G. W.
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979
BERNSTEIN, S.
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
BERRIER, B. L.
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
BERRY, P. W.
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0484 A78-46559
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
BERRY, T.
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
BERRYMAN, B. G.
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
BERTELRUD, A.
An experimental and computational investigation of a swept-wing flow at subsonic speeds
[AIAA PAPER 78-1200] p0423 A78-41890
Calculation of laminar boundary layers on infinite swept wings based on Thwaites two-dimensional method
[FFA-AU-1431] p0488 N78-28061
BERTRAND, W. T.
Infrared radiation from the exhaust jet of a J85-GE-5 turbojet
[AD-A043282] p0042 N78-11110
BERTSCHY, R. G.
Effect of reliability programs on life cycle cost - A case history
p0276 A78-29478
BERTIN, V. R.
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
BERUBE, R. A.
ATC system current and projected problems and recommended solutions - An airline pilot's view
[AIAA PAPER 78-1539] p0482 A78-46511
BESEDOV, N. P.
Tossing of objects by the vortex formed below an air intake
p0128 A78-19682
BESER, J.
Approach guidance logic for a tilt-rotor aircraft
[AIAA 78-1295] p0542 A78-50202
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110
BESPALOV, A. N.
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
BESSON, J.
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
BEST, R.
The influence of coolant turbulence intensity on film cooling effectiveness
p0321 N78-21136
BESTEK, H.
Icing problems on helicopter rotors
[BR59303] p0140 N78-14032
BETHKE, J. J.
Coatings for fretting prevention
p0178 A78-23441
BETTS, W.
Digital avionic communication
p0068 A78-15694
BETZ, R. J.
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
BEVALOT, J.
Assessment of processing methods for titanium alloys for aircraft structures
p0221 A78-26040
BEYER, J. R.
Titanium damage tolerant design data for propulsion systems
[AD-A053252] p0442 N78-26202
BEYERLY, W. R.
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
BEZSONOV, A. N.
Estimating the service life of rolling contact bearings when synthetic oils are used
p0334 A78-34324

BHARATHAN, D.
Aerodynamic stability testing with magnetically suspended models
p0612 N78-32108
BHATELEY, I. C.
Remarks on future computational aerodynamics requirements
p0269 N78-19785
BHUTIANI, P. K.
Prospects for supersonic jet noise suppression
p0329 A78-33089
BIBRING, H.
New materials for high temperature turbines; ONERA's DS composites confronted with blade problems
[NASA-TM-75216] p0087 N78-12085
New materials for high temperature turbines: ONERA's DS composites confronted with the blade problems
p0321 N78-21139
BIEBER, H. J.
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
BIELAWA, R. L.
An analytic study of the energy dissipation of turbomachinery bladed-disk assemblies due to inter-shroud segment rubbing
[ASME PAPER 77-DET-73] p0338 A78-35231
BIESIADNY, T. J.
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
BIGGERS, J. C.
A note on multicyclic control by swashplate oscillation
[NASA-TM-78475] p0323 N78-21159
BIHRLE, W., JR.
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
BIKCHANTAEV, H. KH.
Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
Analysis of GTE tolerance monitoring parameter formation
p0517 A78-48212
BIKLE, P. F.
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
BIKOWSKI, J.
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
BILANIN, A. J.
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Viscous effects in aircraft trailing vortices
p0080 N78-12019
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359
BILGEN, E.
Pressure distribution on a symmetrical butterfly wing
p0415 A78-40799
BILL, R. C.
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials
[NASA-TM-78967] p0503 N78-29215
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
BILLET, M. L.
Flow measurements behind a rotor operating in a boundary layer
[AD-A046359] p0148 N78-15012
BILODEAU, A. A.
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079
BINDER, G.
Wing design for a future airliner
p0471 A78-44619
BINGHAM, P. J.
Maintenance of gas turbine accessory equipment
p0597 A78-53175
BINNIE, W. B.
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
BINSLEY, R. L.
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
BIOT, B.
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
BIRCH, J. R.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
BIRCH, S. F.
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
BIRCHENOUGH, A. G.
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552
BIRD, D. K.
Electromechanical flight control actuation
[SAE PAPER 771004] p0181 A78-23838
BIRD, M. W.
Integrated flight trajectory control
p0061 A78-15563
BIRIUK, V. I.
Rational arrangement of the structural and load-bearing elements of the wing with allowance for certain aerodynamic requirements
p0167 A78-20984
BIRKHEAD, L. M.
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
BISCHOFF, D. E.
Maximum likelihood identification of the longitudinal aerodynamic coefficients of the EA-6B airplane in the catapult launch configuration
[AD-A054243] p0557 N78-31046
BISHOP, G.
Application of self-cleaning air cleaners to aircraft and vehicular gas turbines
p0578 A78-50633
BISHOP, H. R.
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
BITTERS, D. C.
The helicopter route selection model (DYNFLITE)
[AD-A045094] p0096 N78-13047
BIZON, S. A.
The aerodynamic performance of a freely hinged door between two flows
p0586 A78-51464
BJORKMAN, W. S.
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3:

Appendices A-G
[NASA-TM-73224] p0303 N78-20098
BJORNSEN, G. L.
GDM/GPS receiver hardware implementation
p0062 A78-15589
BLACHNIO, J.
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197
BLACK, D. M.
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
BLACKWELL, D. M.
Microprocessor controlled testing of Air Data Computers
p0065 A78-15649
BLACKWELL, J. A., JR.
An empirical correction for wind tunnel wall blockage in two-dimensional transonic flow
[AIAA 78-806] p0296 A78-32360
BLACKWELL, R. H.
Investigation of the compliant rotor concept
[AD-A042338] p0022 N78-10051
BLAGG, R. K.
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
BLAGOSKLONOV, V. I.
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670
BLAIR, A. B., JR.
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control
[NASA-TP-1124] p0301 N78-20079
Wind-tunnel investigation at supersonic speeds of a canard-controlled missile with fixed and free-rolling tail fins
[NASA-TP-1316] p0606 N78-32067
BLAKE, D. E.
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092
BLAKNEY, D. P.
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
BLAND, L. M.
Aircraft structural life monitoring and the problem of corrosion
p0554 N78-30281
BLAND, R.
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
BLANK, D.
Analysis of optimal turning maneuvers in the vertical plane
[AIAA 78-1333] p0482 A78-46531
BLANKENSHIP, C. P.
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
BLANKENSHIP, G. L.
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
BLANKS, J. R.
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
BLASCHKE, G.
Precise enroute navigation based on ground-derived techniques
p0315 N78-21078
BLASS, E.
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses
p0071 A78-16181
BLASZCZYK, J.
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
BLATTNER, D. G.
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
BLAZOWSKI, W. S.
Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor
p0330 A78-33114
BLETHROW, J. G.
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
BLEWITT, S. J.
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
BLICK, E. P.
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from a severe thunderstorm
p0055 A78-14964
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
BLOHM, R. W.
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
BLOM, J. J. H.
Description of a five-parameter profile family
[VTH-LR-220] p0138 N78-14011
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane
[VTH-LR-226] p0148 N78-15019
BLOOMFIELD, P. E.
Piezoelectric polymer transducers for detection of structural defects in aircraft
[AD-A055729] p0621 N78-32903
BLOTTER, P. T.
Model study of dynamic response of landing mat
p0117 A78-18755
BLUFORD, G. S., JR.
Numerical solution of the supersonic and hypersonic viscous flow around thin delta wings
[AIAA PAPER 78-1136] p0421 A78-41840
BLUMENTHAL, D. L.
Airborne sampling system for plume monitoring
p0418 A78-41280
BLUMKE, R. E.
Aircraft cargo compartment fire test simulation program
[NASA-CR-151951] p0324 N78-21223
BOARD, G. W.
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
BOBORYKIN, IU. A.
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291
BOBOVICH, A. B.
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
BOBYE, W. I.
The division of air transport markets between carriers - Local service operations
p0284 A78-30697
BOCCI, A. J.
Flow development on a supercritical wing
p0477 A78-45234
BOCHIN, H. K.
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
BODE, W. E.
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
BODEN, W. H.
The AN/ARC-164 radio - Life-cycle-cost savings
p0276 A78-29479
BOECKER, H. E.
Design of a collision avoidance system model with statistical interrogation
p0304 N78-20107
BOEHM, H.
Current and future navigation and landing systems
p0569 A78-50265
BOEHRET, H.
Integrated flight control system for future transport aircraft
[DGLR PAPER 77-035] p0190 A78-24425

BOERHAAS, L. H. H.
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the H-300 sailplane
[VTH-LR-226] p0148 N78-15019
BOERSTOEL, J. W.
Collection of supercritical aerofoils obtained with the NLR hodograph method
[NLR-TR-75115-U] p0237 N78-18009
Design and analysis of a hodograph method for the calculation of supercritical shock-free aerofoils
[NLR-TR-77046-U] p0488 N78-28059
BOGATKO, V. I.
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
BOGATKO, V. T.
Unsteady hypersonic gas flow past a thin wing of finite span
p0529 A78-49792
BOGDANOV, A. S.
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
BOGGESS, R. L.
Aircraft lightning vulnerability testing
p0062 A78-15585
BOGGS, D. H.
Differential altimetry for satellite orbit determination
p0289 A78-31915
BOGOMOLOV, E. N.
Distortion of a flat jet in a bounded cross-stream in the presence of a wake space
p0580 A78-50779
BOGOMOLOVA, I. N.
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
BOHANNON, G. A.
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
BOHN, H. P.
Aerodynamics of the new generation of combat aircraft with delta wings
p0549 N78-30106
BOHN, P.
Performance predictions of Marcell Dassault-Breguet Aviation aircraft
p0435 N78-26085
BOHNING, R.
Turbulent boundary layer separation on a curved wall with normal compression shock
p0583 A78-51155
BOIRUN, B. H.
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
BOISSEVAIN, A. G.
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
BOKSER, V. D.
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
BOLBOT, A. A.
Communication and navigation antennas for aircraft
p0522 A78-48523
BOLES, M. A.
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
BOLES, R. A.
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
BOLIS, E.
NDI techniques in aerospace
p0443 N78-26461
BOLLINGER, L.
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
BOLSHAGIN, V. I.
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
BOLTZ, F. W.
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 1.5 to 2.0
[NASA-TM-73271] p0199 N78-16062
BONDAR, V. A.
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798
BONDARCHUK, I. B.
In-flight utilization of aircraft radio-navigation instruments
p0473 A78-44799
BONNER, T. F., JR.
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
BONNET, J. P.
Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
BOONE, J. P.
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
BOOTHE, E. M.
Digital avionics, active controls, and the FAA - Advanced integrated flight systems /AIFS/
[AIAA 77-1503] p0006 A78-12250
BOOZE, C. F.
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
BOPPE, C. W.
Computational transonic flow about realistic aircraft configurations
[AIAA PAPER 78-104] p0172 A78-22576
BORAH, J.
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
BORELLO, L.
A synthesis of the effects of noise on structures
p0121 A78-19078
Design of a horizontal tail unit and related adjustments
p0527 A78-49736
BORGER, W. U.
Application of rare earth/transition metal permanent magnets to 400 Hz aircraft systems - An AF overview
p0535 A78-49935
BORGHI, R.
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
BORISOV, V. G.
Heat-resistant equipment for bending shaped material with electrical heating
[AD-A045909] p0145 N78-14411
BORK, P.
20 years IL-18
p0050 A78-13497
BORN, G. J.
Optimal control theory (OWEN) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
BORODIN, V. T.
Piloting and control systems for airplanes and helicopters
p0485 A78-46565
BOROVOI, V. IA.
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
BOROVSKII, V. R.
Some problems of heat transfer in a boundary layer

on continuously moving axisymmetric surfaces
p0598 A78-53309
BORRI, M.
The evaluation of several finite elements for the calculation of wing structures
p0119 A78-19051
BORST, H. V.
Design and analysis of propellers for low Reynolds number application to mini-RPV's
[SAE PAPER 770999] p0181 A78-23834
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104
BOS, H. J.
The lifting wing with minimum drag in supersonic flow
[VTH-LR-234] p0488 N78-28065
BOSCH, J. R.
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
BOSE, S. C.
Real-time simulators for augmented inertial navigation systems
p0537 A78-49967
BOSHENIATOV, B. V.
Pulse tubes for aerodynamic studies
p0415 A78-40298
BOSWELL, G. W.
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
BOTHE, H.
Flight measurement of aircraft onboard antennas
p0115 A78-18504
BOTMAN, M.
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DPT-33] p0135 A78-20598
BOTTERI, B. P.
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
BOTTIGLIERI, C.
Air traffic control in the terminal area - Use of a simulation technique for the definition of an operative model
p0527 A78-49733
Use of simulation techniques in the problem of air traffic control
[QUAD-CALC-ELETT-21] p0395 N78-24111
BOTTOMLEY, J.
Tandem-wing aircraft
p0014 A78-12616
BOTTRELL, M. S.
Lightweight, low compression aircraft diesel engine
[NASA-CR-135300] p0325 N78-21471
BOUCEK, G. P., JR.
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
BOUCHARD, R. J.
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
BOUDREAU, J.
Improved combat survivability for fly-by-wire sensor systems
[AIAA 78-1277] p0541 A78-50186
BOUIS, X.
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
BOUSMAN, W. G.
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
BOUSSIOS, A.
Boron combustion in combinatory propulsion
[ESA-TT-462] p0365 N78-23258
BOUTIER, A.
Laser velocimeter for wind tunnel measurements
p0378 A78-37979
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
BOVY, H. H. W.
The ground-attack/penetration model: A Monte Carlo simulation model to assess the survivability and to evaluate tactics for low-altitude military missions in an environment of groundbased air defence systems
p0431 N78-26051
BOWER, R. E.
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
BOWER, W. W.
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
Viscous flow simulations in VTOL aerodynamics
p0269 N78-19791
BOWERS, A. W.
A more fully Automated En Route ATC system
p0595 A78-52959
BOWERS, D. L.
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
BOWLES, J. V.
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
BOWLES, R. L.
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
BOWMAN, J. S., JR.
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
BOXWELL, D. A.
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
BOYCE, M. P.
Investigation of flow in centrifugal impeller with tandum inducer
p0577 A78-50614
BOYD, G. M.
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
BOYD, T. M.
Aircraft configurations for high-speed ships
[AD-A055540] p0610 N78-32092
BOYD, W. M.
The F-16 sampled data assembly
p0063 A78-15618
BOYD, W. M.
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
BOYDEN, R. P.
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061

Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
Subsonic dynamic stability characteristics of two close-coupled canard-wing configurations
[NASA-TP-1291] p0622 N78-33050
BOYER, J. R., JR.
Reflections on the economic implications of current noise abatement financing proposals
p0583 A78-51132
BOYLE, D.
Cockpit 2000
p0078 A78-17136
BOYNTON, J. L.
Aerodynamic design and verification of a two-stage turbine with a supersonic first stage
p0329 A78-33103
BRAAKSMA, J. P.
Future CTOL aircraft characteristics
p0229 A78-27542
BRADEN, J. A.
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
BRADFORD, T. L.
Conversion of a wind tunnel data acquisition system to minicomputer control
p0106 A78-17373
BRADLEY, J. R., JR.
Dulles control tower console design study
[AD-A056200] p0566 N78-31132
BRADLEY, R. G.
Remarks on future computational aerodynamics requirements
p0269 N78-19785
BRADSELL, R. H.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
BRADSHAW, P.
Interacting shear layers in turbomachines and diffusers
p0336 A78-34828
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
Structure of turbulence in complex flows
p0494 N78-28407
BRAFF, R.
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
BRAGG, M. B.
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
BRAHM, C. B.
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
BRANDEAU, G.
Evolution of a cost-effective, task-oriented, lateral-directional SAS for the A-10 aircraft
[AIAA PAPER 78-1460] p0512 A78-47910
BRANDIN, D. M.
In-flight alignment/calibration techniques for unaided tactical guidance
p0534 A78-49929
BRANDT, A.
Application of a multi-level grid method to transonic flow calculations
p0011 A78-12296
BRANDT, U.
Calculation of viscous flow in straight weakly divergent diffusors
p0583 A78-51158
BRANN, A. J.
Reliability of inertial navigation systems
p0537 A78-49968
BRANT, G.
Low frequency augmentor instability study
[AIAA PAPER 78-996] p0464 A78-43543
BRASLOW, A. L.
A perspective of laminar-flow control
[AIAA PAPER 78-1528] p0481 A78-46503
BRATT, R. W.
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
BRAUN, C. L.
A flight simulation high order language study
p0536 A78-49957
BRAUSCH, J. F.
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
BRAYBROOK, R.
Fighters for the 1990s - Building on today's technology
p0130 A78-20188
BREAKWELL, J. V.
More about flight-path-angle transitions in optimal airplane climbs
p0291 A78-32098
BREANT, Y.
A study on the capacity of runway systems
p0188 A78-24374
BREER, M. D.
Boundary layers in axisymmetric inlets at angle of attack. I - Measurements
[AIAA PAPER 78-1109] p0522 A78-48499
BREGLIO, R. A., JR.
Development of cost estimating relationships for aircraft jet core-engine overhaul costs
[AD-A047667] p0209 N78-17067
BREIDENBACH, D. P.
Effect of performance objectives on the design and cost of future USAF pilot training aircraft
[AIAA PAPER 78-1498] p0515 A78-47938
BREITBACH, E.
Significance of structural nonlinearities from the structural dynamics and aeroelasticity point of view
p0204 N78-17005
Effects of structural non-linearities on aircraft vibration and flutter
[AGARD-R-665] p0211 N78-17076
BREJAUD, H.
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
BREKHIN, N. I.
Dynamics of a string accelerometer
p0131 A78-20256
BREKHOV, A. F.
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
BREMHORST, K.
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
The mean velocity field of unsteady subsonic air jets
p0374 A78-37417
BRENNAN, J. J.
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
BRENNAN, J. V.
The products-liability movement has improved aviation safety

p0335 A78-34644
BRENNER, R.
Warning and marking colours on the apron
p0072 A78-16278
BRENTNALL, W. D.
PRS composites for advanced gas turbine engine components
[AD-A050595] p0355 N78-22165
BRESSEL, C.
Airborne Oceanographic Lidar System
p0053 A78-14878
BREUGELMANS, F. A. E.
The effect of leading-edge thickness on the bow shock in transonic rotors
p0013 A78-12320
BREWARD, M. J.
Westland Wisp
p0264 N78-19149
BREWER, G. D.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
BREZA, M. J.
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
BREZHNEV, A. L.
Construction of higher approximations in the problem of special flows in plane Laval nozzles
p0426 A78-42764
BRICKMAN, R. A.
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
BRIDGES, T. E.
Bermuda II and after
p0223 A78-26471
BRIEHL, D.
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618
BRIEL, D.
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
[NASA-TM-78983] p0558 N78-31061
BRIGGS, F. C., JR.
Technical data requirements for shipboard and shorebased vertical/short takeoff and landing V/STOL aircraft
[AD-A054102] p0500 N78-29093
BRIGGS, P.
Software development for fly-by-wire flight control systems
[AIAA 78-1276] p0541 A78-50185
BRIM, T. A.
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
BRINDLEY, J. F.
The second generation of high-bypass turbofans - A market clouded by uncertainty
p0509 A78-47423
BRINET, B.
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
BRINKLEY, C. W.
B-1 terrain following
p0125 A78-19447
B-1 terrain-following development
p0432 N78-26061
BRINKS, W. H.
F-18A
p0233 A78-28454
BRINTET, B.
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics
[AAAF-NT-77-35] p0403 N78-24587
BRIOT, J. L.
Brief ecological survey of airports and the bird hazard problem
p0115 A78-18666
BRISKEN, A. F.
Automatic continental land mobile position fixing via satellite
p0111 A78-17908
BRISTOL, M. A.
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
BRISTOW, D. R.
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
BRISTOW, R. J.
Development of fiber shields for engine containment
p0026 N78-10079
BRIX, W.
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
BROCK, J. S.
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
BROCK, L.
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
BROCKHAUS, R.
Open-loop compensation of wind-shear effects in low level flight
p0431 N78-26052
BROCKS, W.
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials
p0169 A78-21971
BRODETSKII, M. D.
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
BRODIE, P. M.
New techniques for low cost strapdown inertial systems
p0315 N78-21073
BRODY, M. C.
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
BRODZKI, Z.
A new propeller for agricultural aircraft
p0327 A78-32645
Progress in propeller aerodynamics
p0507 A78-47173
BROEK, J. J.
The use of the total-head rise across the propeller of the De Havilland Canada DHC-2 beaver as a similarity parameter to simulate power-on flight in the wind tunnel
[VTH-190] p0149 N78-15022
BROKOF, U.
Calculating VOR/DME holding procedures
p0114 A78-18503
Improved aircraft tracking using maneuver statistics enroute and in the terminal area
p0316 N78-21087
BROMDZ, L. D.
Extending the service life of aircraft components made of high-strength steels
p0522 A78-48518
BROOKBANK, E. B., III
Forced vibration of thin elastic shells with application to fractional horsepower hermetic refrigeration compressor shells
p0616 N78-32457
BROOKS, C. W., JR.
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
BROOKS, G. D.
A general study of hybrid composite laminates

[AD-A048364] p0266 N78-19208
BROOKS, W. B.
Investigation of a variable camber wing design
[AD-A045951] p0137 N78-14000
BROSS, P. A.
Navigation system aspects of low altitude flight
p0434 N78-26073
BROTHERHOOD, P.
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
BROUGHTON, R. W.
B-1 flight test progress report
[AIAA PAPER 78-1448] p0511 A78-47903
BROUSSARD, J. R.
Verification of fighter aircraft command augmentation control laws by nonlinear simulation
[AIAA 78-1372] p0484 A78-46559
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
BROWAND, F.
Project SQUID
[AD-A047076] p0199 N78-16056
BROWN, A. D.
Steep gradient approach systems research for all-weather operations
p0432 N78-26062
BROWN, C. E.
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048
BROWN, C. H., JR.
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055
BROWN, D. L.
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
BROWN, D. W.
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
BROWN, E. C.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
BROWN, F. D.
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
BROWN, G. A.
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
BROWN, G. J.
A subsonic ramjet engine for expendable drones
[AIAA PAPER 78-962] p0463 A78-43522
BROWN, H.
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
BROWN, J. H., JR.
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
Analytical study of a free-wing/free-trimmer concept
[NASA-CR-2946] p0236 N78-18000
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
BROWN, K. W.
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146
BROWN, L. E., JR.
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
BROWN, L. J.
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
BROWN, P. F.
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
BROWN, R. H.
Integration of a variable cycle engine concept in a supersonic cruise aircraft
[AIAA PAPER 78-1049] p0466 A78-43574
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
BROWN, R. H.
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711
BROWN, S. P.
Detection of flaws in metallic and non-metallic composite structures using liquid crystal technology
p0445 N78-26480
BROWN, S. R.
Flight experience with a fail-operational digital fly-by-wire control system
[AIAA 77-1507] p0007 A78-12253
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197
BROWN, T. J.
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
BROWN, W. H.
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
USB flow characteristics related to noise generation
p0391 N78-24060
BROWNE, N. M.
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
BROWNE, N. H. J.
Canadian Navy experience with small ship helicopter operations
p0261 N78-19129
BROWNHILL, D. J.
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
BROWNIE, R. B.
Porous friction surface runway at USNAS Dallas, Texas
[AD-A042181] p0043 N78-11124
BRUBAKER, P. W.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
BRUCE, E. P.
Project SQUID
[AD-A047076] p0199 N78-16056
BRUCE, T. W.
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
BRUCKMAN, P.
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
BRUCKNER, J. M. H.
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
BRUENING, G.
Aircraft flying performance: Principles, flight attitude, flight phases
p0480 A78-45425
The on-board calculation of optimal climbing paths
p0434 N78-26078
BRUMAGHM, S. H.
Ride technology applications to large passenger aircraft
p0331 A78-33443

BRUN, H.
Low cycle fatigue in turbines
[NASA-TM-75264] p0264 N78-19156
BRUNE, G. W.
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
An improved version of the NASA-Lockheed multielement airfoil analysis computer program
[NASA-CR-145323] p0301 N78-20077
BRUNER, G.
The attack helicopter Hughes YAH-64
p0003 A78-12035
Early warning aircraft
p0342 A78-35898
BRUNETAUD, R.
The development of materials for turbojets
p0221 A78-26041
BRUNNER, D.
Simulation and development possibilities of the manual control concept in the near range and control zone
p0304 N78-20104
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
BRUNSTEIN, A. I.
Clear air turbulence accidents
p0273 A78-28833
BRUSSAT, T. R.
Fracture mechanics for structural adhesive bonds
[AD-A054023] p0504 N78-29509
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions
[AD-A055483] p0617 N78-32504
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483
BRUSSON, J.-P.
Recent progress and technical and economic outlooks in the processing of materials for airframe elements
p0221 A78-26036
BRUTIAN, H. A.
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
BRUTON, R. A.
Structural fatigue testing
p0554 N78-30279
BRY, P.
Loss prediction in axial compressors - A bibliographic study
[ONERA, TP NO. 1978-65] p0383 A78-38892
BRYAN, R. L.
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
BRYANT, C. S.
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
BRYANT, J. C.
A data management system for weight control and design-to-cost
p0635 N78-33780
BRYANT, S. L.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
BRYANT, W. H.
VALT parameter identification flight test
p0480 A78-45439
BRYSON, A. E., JR.
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
BUBLITZ, P.
The stall problem
p0204 N78-17006
BUCH, A.
The damage sum in fatigue of structure components
p0226 A78-26834
The damage sum in fatigue of structure components
[ICAF-1032] p0411 N78-25454
Effect of aircraft loading program modifications on the fatigue life and damage cumulation. Part 1: Effect of load peaks in case of central hole sheet specimens
[TAE-334-PT-1] p0616 N78-32462
BUCHAN, F.
An investigation of the induced aerodynamic effects of a vectored non-axisymmetric exhaust nozzle
[AIAA PAPER 78-1082] p0466 A78-43588
BUCHELE, D. R.
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
BUCHSTALLER, M.
Open loop gust alleviation
[BMFT-FB-W-77-22] p0353 N78-22114
BUCKLER, A. T.
A review of the literature on electro-optical flight displays
[AD-A053310] p0440 N78-26141
BUELL, R. H.
Some test results concerning visibility of obstacle and hazard beacons
p0280 A78-29907
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DIR-IB-553-75/9] p0146 N78-14895
BUETEFISCH, K. A.
Determination of the vortex shedding frequency of cascade with different trailing edge thickness
p0347 N78-22067
BUFFUM, H. E.
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
BUISSON, D.
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
BUISSON, M.
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
BULAND, B.
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
BULLARD, J. B.
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131
BULLEN, F. P.
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
BULYGIN, I. P.
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
BUNAKOV, Y. N.
Determination of bending stresses in a spur gear tooth
[RAE-LIB-TRANS-1923] p0504 N78-29452
BUNKER, W. H.
Circles, texture, etc. - Alternate approaches to CIG scene detail
[AIAA 78-1578] p0579 A78-50659
BUNKOV, V. G.
Complete problem of matrix eigenvalues in flutter analysis
p0127 A78-19655
Use of the polynomial method to calculate the parameters of the stabilized maneuver of an elastic aircraft
p0166 A78-20930
BUONO, D. F.
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability

[ASME PAPER 77-DET-26] p0134 A78-20595
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
BURDESS, J. S.
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
BURDGES, K. P.
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
BURELLE, G.
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
BURESTI, G.
The aerodynamic design of cascade airfoils - A new exact method based on conformal mapping
p0121 A78-19072
BURGIN, R. E.
The missed approach
p0587 A78-51517
BURHANS, R. W.
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068
BURK, D. O.
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165
BURK, S. M., JR.
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
BURKHALTER, J. E.
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094
BURKHARD, A. H.
Development of a combined environment test for reliability assessment of avionics systems
p0061 A78-15561
BURKHARDT, P.
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
BURMAN, Z. I.
A superelement technique for designing helicopter fuselages
p0174 A78-22627
Superelement method for helicopter fuselage analysis
p0517 A78-48209
Superelement method of designing a helicopter fuselage
p0206 N78-17043
BURNS, B. R. A.
Going for a spin - Fighter style
p0288 A78-31745
BURNS, J. V.
Constant speed generating systems
[SAE PAPER 771001] p0181 A78-23835
BURNS, R. C.
Multi-Function Inertial Reference Assembly /MIRA/ update
p0535 A78-49941
BURNSIDE, W. D.
Surface current and charge density induced on aircraft
p0169 A78-21990
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
BUROV, B. V.
The Mi-6A helicopter
p0221 A78-26000
BURROWS, L.
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
BURTE, H. M.
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
BURTH, K.
Concerning the relationship between element stability and system stability in wing-truss structure made from elastic and elasto-plastic materials
p0169 A78-21971
BURTON, G. T.
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
BURTON, T. D.
Simple numerical model for calculation of entry vehicle trim response
p0585 A78-51284
BUSBY, D. E.
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
BUSCH, A. C.
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
BUSCH, E.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
BUSH, L. F.
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
BUSHUEV, A. B.
Automatic system employing radioactive radiation to level-out an aircraft at landing
p0216 A78-25011
BUSS, L. B.
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
BUSTELO, R. A.
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
BUTEAU, J. D.
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
BUTENKO, V. A.
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090
BUTKO, V. S.
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
BUTLER, H. D.
Hydrogen content of hydrocarbon fuels by a low-resolution nuclear resonance method
[AD-A054465] p0503 N78-29262
BUTLER, T. D.
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
BUTTINGER, J. D.
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
BUTZE, H. P.
Alternative fuels
p0040 N78-11074
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
BUXBAUM, O.
Review of investigations on aeronautical fatigue in the Federal Republic of Germany, May 1975 - April 1977
[LBF-S-133] p0046 N78-11426

BYCHKOV, S. I.
Electronic aircraft collision avoidance system
p0376 A78-37603
BYERS, J. L.
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592
BYLES, W. E.
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062

C

CADDELL, W. E.
Design considerations in formulating V/STOL lift plus lift/cruise supersonic fighter concepts
p0109 A78-17878
CALABRO, S.
Effects of engine cycle parameters on the dimensions of a commercial aircraft with low community noise levels
p0121 A78-19090
CALDER, P. H.
Engine options for supersonic cruise aircraft
[AIAA PAPER 78-1054] p0466 A78-43576
CALHOUN, G. L.
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
CALISE, A. J.
A singular perturbation analysis of optimal aerodynamic and thrust magnitude control
p0183 A78-23900
Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
CALLAS, G. P.
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
CALLEN, T. R.
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
CALVO, R.
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
CAMERON, J. A.
British Airways helicopter operations
p0262 N78-19133
CAMP, D.
Satellite images to aircraft in flight
p0056 A78-14982
CAMP, D. W.
Helicopter response in gusty winds about a building
p0055 A78-14954
Preliminary comparison of model and prototype wakes
[AIAA PAPER 78-254] p0162 A78-20774
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Wind shear modeling for aircraft hazard definition
[NASA-CR-155223] p0034 N78-11022
Overview of NASA/Marshall Space Flight Center's program on knowledge of atmospheric processes
p0267 N78-19714
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
CAMP, R. T., JR.
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
CAMPBELL, J. F.
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059
CAMPBELL, J. P.
Overview of powered-lift technology
p0389 N78-24047
CAMPBELL, R. L.
Full-scale testing of an Ogee tip rotor
p0620 N78-32830
CANDEL, S.
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909
CANDY, D. W.
A Navstar/GPS simulator
p0062 A78-15592
CANFIELD, E. B.
Variable speed constant frequency /VSCF/ aircraft electrical power
[SAE PAPER 771002] p0181 A78-23836
CANNADAY, R. L.
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
CANNON, M. J.
Multi-system position determination - An innovative approach to low cost area navigation
[AIAA 77-1513] p0007 A78-12258
CANNON, M. W., JR.
Terrain Contour Matching (TERCOM): Sensitivity to heading and ground-speed errors
[AD-A056127] p0609 N78-32084
CANTOR, A.
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
CAPELLUPO, J. P.
'New look' in assurance technology - 'The Hornet'
[AIAA PAPER 78-323] p0185 A78-24017
CAPODANNO, P.
Two extensions of a theorem of Levi-Civita to gyroscopic systems and some applications
p0570 A78-50311
CAPONE, P. J.
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TN-D-8449] p0081 N78-12037
Longitudinal aerodynamic characteristics of a fighter model with a close-coupled canard at Mach numbers from 0.40 to 1.20
[NASA-TP-1206] p0456 N78-27136
Aerodynamic characteristics induced on a supercritical wing due to vectoring twin nozzles at Mach numbers from 0.40 to 0.95
[NASA-TM-78746] p0543 N78-30039
CAPONE, L. A.
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
CAPRILE, C.
A program for the interactive design of wing structures
p0120 A78-19063
CAPRILI, M.
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
CAPUTO, E. J.
Aircraft electrical system testing and data reduction using digital techniques
p0535 A78-49937
CARACENA, F.
An analysis of three weather-related aircraft accidents
[NASA-CR-155363] p0239 N78-18024
CARADONNA, F. X.
The transonic flow on a helicopter rotor
p0557 N78-31042
CARBONE, E. R.
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
CARDANI, C.
The evaluation of several finite elements for the calculation of wing structures
p0119 A78-19051
Continuation and direct solution of the flutter equation
p0221 A78-25703
CARDEN, H. D.
Improved aircraft dynamic response and fatigue life during ground operations using an active

control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Validation of a Flexible Aircraft Take-Off and Landing Analysis (FATOLA)
[NASA-TP-1025] p0022 N78-10049
CARDINALE, S. V.
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
CARDINI, G.
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054
CAREL, O.
The victory of the frequency-reference beam over the Doppler MLS at AWOP 6
p0115 A78-18664
CAREY, G. F.
Variational principles for the transonic airfoil problem
p0285 A78-30891
CARLIN, C. M.
Propulsion/flight control integration technology (PROFIT) design analysis status
[NASA-CR-144875] p0501 N78-29101
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102
CARLSON, C. E.
Holographic inspection of jet engine composite fan blades
[SAE PAPER 770975] p0179 A78-23819
CARLSON, H. W.
Simplified sonic-boom prediction
[NASA-TP-1122] p0301 N78-20078
Estimation of leading-edge thrust for supersonic wings of arbitrary planform
[NASA-TP-1270] p0623 N78-33051
CARMICHAEL, R. L.
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
CARNEBIANCA, C.
A method for determining the induced resistance of wings with high aspect ratio in a subsonic regime
p0120 A78-19065
CARNES, W. T.
Analog to digital airplanes - One easy step
[AIAA 77-1469] p0005 A78-12228
CARO, P. W.
Some current problems in simulator design, testing and use
[AD-A043240] p0044 N78-11127
Some factors influencing Air Force simulator training effectiveness
[AD-A043239] p0044 N78-11128
CARPENTER, P. W.
Small perturbation theory for supersonic jets
[AIAA PAPER 78-1151] p0421 A78-41851
CARR, L. W.
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
Water-tunnel experiments on an oscillating airfoil at RE equals 21,000
[NASA-TM-78446] p0253 N78-19058
CARR, M. P.
The calculation of transonic flow over three-dimensional swept wings using the exact potential equation
p0477 A78-45232
Flow development on a supercritical wing
p0477 A78-45234
CARR, P. C.
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
CARRARA, G.
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345
CARRILLO, J. G.
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
CARROLL, J. T.
Radiographic examination of T55 engine
[AD-A055108] p0564 N78-31113
CARROLL, J. V.
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
CARROLL, R. W.
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
CARROU, J. C.
Utilization of Precilec information /aircraft attitude and position/ for geometric image corrections
p0232 A78-28399
CARSON, T. M.
Optimal guidance and control for investigating aircraft noise-impact reduction
[NASA-TP-1237] p0363 N78-23100
CARSTENS, R. L.
Formulation of Iowa State airport system
p0229 A78-27548
CARTA, F.
Project SQUID
[AD-A047076] p0199 N78-16056
CARTA, F. O.
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
CARTER, A. L.
Strain gage calibration of a complex wing
p0071 A78-16182
CARTER, J. E.
Inverse boundary-layer theory and comparison with experiment
[NASA-TP-1208] p0615 N78-32385
CARTER, M. J.
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
CARTWRIGHT, D. J.
Stress intensity factors, for collinear cracks in a stiffened sheet
p0378 A78-38122
Case studies in fracture mechanics
[AD-A045877] p0102 N78-13482
CARUSO, H.
Practical experience in vibration testing external avionics systems
p0292 A78-32134
CASAROSA, C.
The interaction between the characteristics of the operational environment and the flight performance of second-generation STOL aircraft - Some preliminary results
p0121 A78-19073
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Takeoff performance of STOL aircraft
p0527 A78-49744
CASE, B.
Bearing study program
[AD-A049767] p0314 N78-21068
CASE, T. W.
A comparison of three computerized design algorithms for control systems
p0107 A78-17527
CASLER, R. J., JR.
Dual-control guidance strategy for homing interceptors taking angle-only measurements
p0225 A78-26784
CASSIDY, J. E.
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
CASTANON, D.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
CASTELLANI, A.
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
CASTILLO, J. P.
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
CASTLE, C. B.
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494

CATALANO, G. D.
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Investigations of scaling laws for jet impingement
p0393 N78-24074
CATHERINES, J. J.
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721
CAUGHEY, D. A.
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
CAVAGNARO, D. M.
Air pollution emission factors: A bibliography with abstracts
[NTIS/PS-78/0548/4] p0617 N78-32604
CAWLEY, J.
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
CAWTHORN, J. M.
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
CEA, R. A.
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
CEBECI, T.
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
CERCIGNANI, C.
Numerical study of transonic profiles
p0120 A78-19061
CERMAK, J. E.
Applications of wind tunnels to investigations of wind-engineering problems
[AIAA 78-812] p0296 A78-32366
CERNY, O. P.
Subsystem verification of an AFLC organically developed F-15 simulation
p0533 A78-49901
CERVANTES, J. A.
Cutout reinforcement of stiffened cylindrical shells
[AIAA 78-512] p0279 A78-29811
CHAKHOIAN, A. A.
Natural frequencies of a soft heavy cylindrical shell under the effect of internal pressure
p0580 A78-50717
CHAKI, E.
New model VOR/DME
p0373 A78-37246
CHAKRABARTTY, S. K.
Integral equation formulation for transonic flow past lifting wings
p0571 A78-50459
CHAKRABORTY, S. K.
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
CHALSTROM, H. B., JR.
Palefac
[AD-A048331] p0244 N78-18065
CHAMAY, A. J.
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
CHAMBERS, J. R.
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
CHAMPINE, R. A.
Vortex attenuation flight experiments
p0081 N78-12028
CHANDIRAMANI, K. L.
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
CHANDLER, H. E.
Problem-solving with selective plating
p0383 A78-38900
CHANDLER, R. F.
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
CHANG, B. J.
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064
CHANG, J. W.
Computer simulation of terminal utilization
p0469 A78-44225
CHANG, K. S.
Calculation of supercritical flow past a double wedge by Telenin's method
p0011 A78-12301
Asymmetric supercritical flow past a double wedge with embedded shocks
p0603 N78-32042
CHANG, P. Y.
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
CHANTOUS, I. M.
Erosion prevention and film cooling on vanes
p0320 N78-21128
CHAO, K. L.
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
CHAO, K.-L.
Prediction of the unsteady airload on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
CHAPKIS, R. L.
Investigation of ground reflection and impedance from flyover noise measurements
[NASA-CR-145302] p0251 N78-18874
CHAPLIN, H. R.
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
CHAPMAN, G. T.
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
CHARAK, M. T.
Aircraft use in weather modification
p0056 A78-14995
CHAREST, J. R.
Combustor design and operation for a sub-scale turbojet test cell
[AD-A053791] p0455 N78-27134
CHARLES, E. R.
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
CHARLES, J. P.
Instructor pilot's role in simulation training, phase 2
[AD-A047919] p0212 N78-17082
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
CHARPENEL, M.
Measuring techniques in high temperature turbines
p0322 N78-21151
CHARVES, E.
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
CHASE, W. D.
Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] p0246 N78-18083
CHATTOT, J.-J.
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
CHAUSSEE, D. S.
Perturbation solutions for blade-to-blade surfaces of a transonic compressor

p0012 A78-12307
CHEATUM, T. G.
Interface design considerations for F-16 sensors and weapons
p0532 A78-49874
CHEESEMAN, I. C.
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
CHEKHAROVSKII, I. T.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
CHEN, A. W.
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
CHEN, C. H.
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
CHEN, I.
Trajectory optimization for some sailplane performance problems
p0560 N78-31083
CHEN, K.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
CHEN, P. P.
Accuracy requirement and cost effectiveness of GPS-aided INS for tactical fighters
p0538 A78-49989
CHEN, P.-W.
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
CHEN, T. C.
Multiprocessing tradeoffs and the wind-tunnel simulation problem
p0270 N78-19805
CHENEY, H. K.
YC-15 STOL performance flight test methods
p0125 A78-19445
CHENOWETH, H. B.
The error function of analytical structural design
p0291 A78-32123
CHEREMUKHIN, G. A.
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
CHERNENKO, ZH. S.
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
The An-26 aircraft: Construction and use
p0283 A78-30273
CHERNIAVSKII, S. IU.
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
CHERNOV, I. A.
Construction of higher approximations in the problem of special flows in plane Laval nozzles
p0426 A78-42764
CHERTKOVA, N. IA.
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025
CHERUBINI, G.
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
CHESNOKOV, S. S.
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
CHESNUTT, J. C.
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
CHIESA, S.
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
CHIKOV, V. P.
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090
CHILD, R. D.
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
CHIN, W. C.
Some singular aspects of three-dimensional transonic flow
p0223 A78-26234
Nonlinear formulation for low-frequency transonic flow
p0376 A78-37733
CHIRIKHIN, A. V.
Nonequilibrium reverse flow in a Laval nozzle
p0128 A78-19681
CHISTIAKOV, F. K.
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
CHIU, H.-Y.
A spectroradiometer for airborne remote sensing
p0298 A78-32396
CHIU, S. T.
Fracture mechanics for structural adhesive bonds
[AD-A054023] p0504 N78-29509
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions
[AD-A055483] p0617 N78-32504
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483
CHMYR, G. I.
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687
Application of the method of integral equations to the calculation of subsonic gas flows through turbine blade cascades
p0600 A78-53783
CHONAN, S.
Dynamic coefficient of an elastically supported, pre-stressed beam
p0424 A78-42100
CHOPIN, M. H.
Quiet propeller/rotor concept evaluation
[AD-A047297] p0197 N78-16047
CHOPRA, I.
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
CHOU, D. C.
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
CHOU, Y. T.
Analysis of pavements designed by CBR equation
p0426 A78-42856
Analysis of permanent deformations of flexible airport pavements
[AD-A044269/9] p0099 N78-13079
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183
CHOUDHURY, S. B.
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
CHOW, S.-T.
Automatic low frequency gain limiting for A-C coupled signal processing systems
p0054 A78-14938
CHOWN, M.
An optical fibre, multi-terminal data system for aircraft
p0202 N78-16849
CHOY, K. C.
Dynamic analysis of flexible rotor-bearing systems

using a model approach
p0616 N78-32424
CHRIST, R. F.
Alpha Jet - A European aircraft production program with a great future
p0470 A78-44616
CHRISTENSEN, B. P.
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
CHRISTENSON, J. A.
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
CHRISTIANSEN, V. T.
Model study of dynamic response of landing mat
p0117 A78-18755
CHRISTIE, R. S.
Downed Airman Power Source (DAPS) for inclusion into the RSSK-8A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044483] p0083 N78-12052
Downed Airman Power Source (DAPS) for inclusion into the RSSK-1A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044481] p0083 N78-12053
CHRISTOPHER, E.
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
CHU, C. S.
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
CHU, S.
Prediction of pressure field induced by lifting surfaces with unsteady airloads and its application
p0580 A78-50673
CHUBAROV, V. I.
Use of the vorticity method in computing the aerodynamic characteristics of a thin wing in a steady supersonic flow
p0126 A78-19626
Taking into account the effect of elasticity of the structure on the longitudinal short-period motion of an aircraft
p0164 A78-20882
CHURCHILL, A. V.
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
CICCI, F.
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
CIELAK, Z. M.
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185
CIEPLUCH, C. C.
Preliminary QCSEE program - Test results
[SAE PAPER 771008] p0181 A78-23840
Preliminary QCSEE program test results
[NASA-TM-73732] p0151 N78-15042
Overview of the QCSEE program
p0392 N78-24066
CIPPONE, D. L.
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
Application of laser velocimetry to aircraft wake-vortex measurements
p0080 N78-12021
CILETTI, M. D.
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
CIMINERA, V. R.
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
CITICI, A.
Erosion prevention and film cooling on vanes
p0320 N78-21128
CLAPP, D.
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
CLAPP, D. P.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
CLARK, B. J.
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
CLARK, E. L.
Digital spectral analysis and filtering of experimental aerodynamic data
[SAND-77-0225] p0093 N78-13022
CLARK, G. M.
The helicopter route selection model (DYNFLITE)
[AD-A045094] p0096 N78-13047
CLARK, J.
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
CLARK, J. I.
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165
CLARK, J. W., JR.
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
CLARK, L. T.
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
CLARK, M.
Wake turbulence - Gone with the wind
p0188 A78-24347
CLARK, R.
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
CLARK, R. N.
A simplified instrument failure detection scheme
p0481 A78-46377
CLARK, S. K.
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
CLARK, T. A.
F100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
CLARKE, J. F.
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
CLARKE, W. R.
Technical data requirements for shipboard and shorebased vertical/short takeoff and landing V/STOL aircraft
[AD-A054102] p0500 N78-29093
CLAUS, R. W.
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
CLAUSS, J. S., JR.
The common case study: Lockheed design of a supersonic cruise vehicle
[NASA-CR-158935] p0625 N78-33086
CLAY, B. R.
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
CLAY, C. W.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
CLAYTON, R. M.
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
CLEARY, R. W.
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343

CLEMENT, W. F.
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
Simulation and analysis of wind shear hazard
[NASA-CR-157470] p0504 N78-29699
CLEVEN, W.
Spacelab: Testing of Metalbond 328 WC and foam adhesive BSL 208/5
[POK-R-2162] p0442 N78-26221
CLODFELTER, R. G.
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
CLOSE, D. H.
Advanced pattern matching for navigation and guidance
p0539 A78-49998
CLOUD, E. L.
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
CLOUTIER, P. L.
Null steering antennas in the tactical scenario
p0226 A78-27037
CLULEY, A. P.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
COBB, E. R.
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
COCHRANE, J. A.
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
COCKBURN, J. J.
Jaguar and Tornado avionic development testing
p0380 A78-38748
COCKING, B. J.
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
COE, H. D.
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
COE, P. L., JR.
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
Distributed upper-surface blowing concept
p0390 N78-24056
Supersonic transport
[NASA-CASE-LAR-11932-1] p0609 N78-32086
Effects of wing leading-edge deflection on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration
[NASA-TM-78787] p0622 N78-33047
COHEN, A. A.
Avionic Central Information System /A.C.I.S./
p0055 A78-14945
COHEN, D.
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
COHEN, E. E.
Combined military and commercial application of light helicopters
p0262 N78-19136
COHEN, L. E.
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
COHEN, M.
A computer controlled aircraft collision avoidance system
[AIAA 77-1524] p0008 A78-12264
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
COHET, C.
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
COLAMOSCA, B.
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
COLANTONIO, A.
Use of a field bench for testing turbojet engines
p0527 A78-49731
COLBURN, W. S.
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064
COLE, E. L.
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122
COLE, G. L.
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
Mechanical characteristics of stability-bleed valves for a supersonic inlet
[NASA-TM-X-3483] p0098 N78-13063
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control
p0605 N78-32062
COLE, J. D.
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
COLE, L. G.
Constant false alarm rate detector for a pulse radar in a maritime environment
p0538 A78-49975
COLEMAN, D. R.
Improved passenger flow through simulation
p0570 A78-50437
COLES, D.
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887
COLLADAY, R. S.
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
COLLET, F.
A study on the capacity of runway systems
p0188 A78-24374
COLLEY, W. C.
Augmentor emissions reduction technology program
[NASA-CR-135215] p0097 N78-13057
COLLINS, F. G.
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
COLLINS, J. B. V.
Testing a modern strike aircraft navigation system
p0175 A78-22852
COLLINS, J. F.
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
COLLINS, W.
A spectroradiometer for airborne remote sensing
p0298 A78-32396
COLLINSON, R. P. G.
Fly-by-wire flight control
p0280 A78-29935
The role of avionics in modern aircraft
p0328 A78-32651
COLPIN, J.
Inlet flow distortions in axial flow compressors
p0419 A78-41508
COMEY, D. H.
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
COMFORT, D. L.
RIM: A prototype for a relational information management system
p0635 N78-33785

CONPITELLO, F. E.
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
CONDELL, H. M.
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028
CONKLE, J. P.
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
CONLON, J. A.
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
CONNER, D. W.
CTOL concepts and technology development
p0461 A78-43358
CONNOLLY, J. W.
An overview of aviation weather services
p0267 N78-19715
CONRAD, E. W.
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
CONROW, E. H.
A parametric analysis of TERCOM false fix probability
p0539 A78-49997
CONROW, E. H., SR.
The feasibility of an airborne thermal infrared position updating system
[AIAA 77-1477] p0005 A78-12234
CONSTANT, A.-M.
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
CONSTANT, E. W., II
Genesis N + 1: The origins of the turbo-jet revolution
p0252 N78-19047
CONSTANZ, J. C.
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549
CONTE, A. A., JR.
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs
[AD-A046824] p0153 N78-15287
CONTE, M.
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
CONTICELLI, V. M.
The influence of engine position on aircraft noise
p0121 A78-19083
COOK, G.
Optimal digital simulation of aircraft via random search techniques
p0385 A78-39182
COOK, L. P.
A uniqueness proof for a transonic flow problem
p0225 A78-26599
COOK, O. H.
A method of predicting stress corrosion cracking
p0468 A78-44105
Study to identify stress corrosion prone parts on the TA-7C aircraft
[AD-A045489] p0100 N78-13186
COOK, W. J.
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
A study of test section configuration for shock tube testing of transonic airfoils
[NASA-CR-157237] p0442 N78-26153
COOK, W. W.
The problem of technology transfer: Real or imagined
[AD-A042961] p0213 N78-17943
COOKSEY, J. M.
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
COOLEY, D. E.
Close encounters of the aeroservoelastic kind
[AIAA 78-1289] p0542 A78-50196
COONAN, J. R.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
COONAN, R.
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
COONROD, J. P.
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
COONS, P. G.
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
COOPER, J. R.
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance study. User's manual
[AD-A045625] p0091 N78-13001
COOPER, L. P.
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
COOPER, P. G.
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
COOPER, T. D.
The economic implications of NDE: Opportunities and payoff
p0443 N78-26463
COPPOLA, A.
Experimental determination of a more powerful burn-in
p0481 A78-46321
CORBIN, J. C., JR.
Protection of systems avionics against atmospheric electricity hazards - Lightning and static electricity
p0065 A78-15652
Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
CORK, T. B.
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097
CORLEY, R. C.
Failure detection and correction for turbofan engines
p0184 A78-23918
CORNERY, G.
Supersonic transport in terms of energy savings
p0342 A78-35893
Supersonic transportation faced with energy savings
[AAAP-NT-77-28] p0397 N78-24131
CORREGE, G.
New structures made of composite materials for high performance combat aircraft
p0550 N78-30114
CORSIGLIA, V. R.
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
Laser-velocimeter surveys of merging vortices in a wind tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043
CORTEN, P. L. J. H.
The ITC PHOTNAV system
p0074 A78-16536
CORVIN, I.
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
COSGROVE, D. V.
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming O-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
COSTE, J.
Six degrees of freedom system for store separation

studies in ONERA wind-tunnels
[ONERA, TP NO. 1977-100] p0191 A78-24460
COTE, S. H.
T58 propulsion system duty cycle
[AIAA PAPER 78-1088] p0467 A78-43592
COUCH, R. P.
Detecting abnormal turbine engine deterioration using electrostatic methods
[AIAA PAPER 78-1473] p0513 A78-47919
Detecting abnormal turbine engine deterioration using electrostatic methods
p0590 A78-51946
COULMY, G.
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
COULOMB, J.
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
COULOMBE, S. A.
Helmet Mounted Sights - Closing the loop with an open-loop system
p0067 A78-15672
COULOMBEIX, C.
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
COUPRY, G.
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
COUSTEIX, J.
Research on unsteady turbulent boundary layers
p0146 N78-14992
COUTSOUBADIS, D.
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
COVENEY, R. W.
Stress intensity factors for a cracked hole in a row of holes
[RAE-TR-77073] p0154 N78-15525
COX, D. H.
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands
[NASA-CR-135307] p0459 N78-27427
COX, T. L.
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089
COYLE, J. J.
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325
CRABBE, E. N.
Simple theory of spinning with particular reference to the HS Gnat trainer
p0467 A78-43635
CRAIG, R. E.
Development of techniques and correlation of results to accurately establish the lift/drag characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
CRAIG, S. J.
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
CRAIG, V. F. J.
Aviation fuel usage - Economy and conservation
p0285 A78-30698
CRANE, D. F.
Simulation replay - Implementation and flight simulation applications
p0381 A78-38789
CRANE, K. C. A.
Driver gas contamination in a high-enthalpy reflected shock tunnel
p0223 A78-26235
CRAWFORD, C. C., JR.
Noise requirements from a military point of view
p0619 N78-32819
CRAWFORD, C. B.
Computer simulations of ATCRBS processing equipment for use with the aims and transient effects performance prediction models
[AD-A046758] p0139 N78-14025
Proposed methods and criteria for ATCRBS PRF assignment
[AD-A050050/4] p0360 N78-23074
CREAGER, M.
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions
[AD-A055483] p0617 N78-32504
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483
CRECRAFT, H.
185 W/kg solar array for naval sea control systems
p0002 A78-10964
CREDEUR, L.
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima
[NASA-TM-78624] p0035 N78-11023
CREEL, T. R., JR.
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
CREWS, L. L.
Software structured weapon delivery
p0532 A78-49875
CREWS, S. T.
Unsteady hovering wake parameters identified from dynamic model tests
p0203 N78-16992
CRIMBRING, W. R.
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
CRIMMEL, W. W.
F-4E austere heads-up display/gunsight evaluation
p0124 A78-19434
CROLL, R. H.
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[AIAA 78-785] p0295 A78-32343
CROLL, R. H., JR.
Digital spectral analysis and filtering of experimental aerodynamic data
[SAND-77-0225] p0093 N78-13022
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
CROMWIJK, J. A.
Adhesion of erosion resistant tapes on several surface configurations
[FOK-R-2132] p0442 N78-26220
CROOK, W. G.
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
CROOM, D. R.
The development and use of spoilers as vortex attenuators
p0081 N78-12027
CROSBY, B.
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037
CROSS, S. E.
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078
CROSS, W. F.
Small ballooning serves the Navy

p0004 A78-12174
CROSS, W. V.
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
CROSSGROVE, W. A.
MIL-STD-1553B proposed
p0531 A78-49866
CROSSLEY, P. A.
Correlation of microstructure with fracture toughness properties in metals, part 3
[AD-A043741] p0045 N78-11238
CROSSLEY, T. R.
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
CROUCH, R. W.
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
CROW, S.
Some aspects of aircraft wake behavior near the ground
p0055 A78-14960
CROWE, L. R.
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
CROWELL, H. A.
The design process
[AIAA PAPER 78-1483] p0514 A78-47928
CRUM, P.
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
CRUTZEN, P. J.
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
CUFFEL, R.
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
CULHANE, K. V.
The Soviet attack helicopter
[AD-A050649] p0349 N78-22080
CULLEN, W. H.
Fatigue crack growth of titanium fan blades
p0589 A78-51744
CULLEY, H.
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
CULLOM, R. R.
Altitude test of several afterburner configurations on a turbofan engine with a hydrogen heater to simulate an elevated turbine discharge temperature
[NASA-TP-1068] p0041 N78-11106
CULOTTA, R. F.
Static pressure orifice system testing and apparatus
[NASA-CASE-LAR-12269-1] p0630 N78-33123
CUMMING, H. J.
ALC/50/ values for some polymeric materials
p0371 A78-36596
CUMPSTY, N. A.
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
Rotor-stator interaction noise with hindsight
p0329 A78-33093
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091
CUNNAN, W. S.
Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109
CUNNINGHAM, A. M., JR.
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118
CUNNINGHAM, A. R.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
CUNNINGHAM, R. E.
Steady-state unbalance response of a three-disk flexible rotor on flexible, damped supports
p0275 A78-29326
Influence of oil-squeeze-film damping on steady-state response of flexible rotor operating to supercritical speeds
[NASA-TP-1094] p0098 N78-13064
CUNNINGHAM, T. B.
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
Sensor failure detection using analytical redundancy
p0182 A78-23862
CUNNINGTON, G. R., JR.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
CUNNOLD, D. M.
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
CUPSTID, J. E.
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report
[AD-A053362] p0409 N78-25098
CURRIE, N. C.
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
CURRY, R. E.
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
CURRY, W. H.
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121
CURTICE, W. L.
Test instrumentation system for flight simulator handling characteristics
[AIAA 78-1595] p0579 A78-50669
CURTIN, M.
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
CURTIS, G. D.
Changes in ground noise levels of general aviation aircraft derived from changes in cockpit noise levels
p0002 A78-11488
CURTISS, H. C., JR.
Aerodynamic and hovering control of LTA vehicles
[AD-A045315] p0082 N78-12047
An experimental and analytical investigation of the hovering and forward flight characteristics

of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle
[PB-277674] p0395 N78-24099
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091
CUSCINI, A.
Erosion resistant coatings
p0120 A78-19056
CUSUMANO, S. J.
An extended Kalman filter fire control system against air-to-air missiles, volume 2
[AD-A055637] p0610 N78-32091
CUTLER, I. B.
New materials in the Si-C-Al-O-N and related systems
p0601 A78-53864
CWIWAR, D. S.
Procedures for generation and reduction of linear models of a turbofan engine
[NASA-TP-1261] p0556 N78-30896
CYHAN, F. B.
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
CZUCHRY, A. J.
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063

D

DABBS, B. S.
Metal technology for future aircraft design
p0550 N78-30115
DABOO, J. E.
Avionics and the MRCA
p0141 N78-14046
DADE, W. W.
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
DADONE, L. U.
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2
[NASA-CR-2915] p0203 N78-16998
DAEUBLER, H.-G.
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
DAGENHART, J. R.
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
DAHLEN, V., III
Supercruiser fighter analysis
p0549 N78-30107
DAHMAN, K. R.
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
DAHOD, A. M.
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
DAI, G.-H.
Pressure dependence of turbulent jet noise
p0470 A78-44357
DAIGUJI, H.
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997
DAILY, J. W.
Laboratory studies of lean combustion
p0040 N78-11079
DAINEKO, V. I.
The start-up of a gas turbine engine using compressed air tangentially fed onto the blades of the basic turbine
p0187 A78-24149
DAIUTOLO, H.
Development and evaluation of a wake vortex advisory system
p0595 A78-52965
DAJANI, J. S.
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979
DALEY, E.
AIDS in military aircraft
p0510 A78-47866
DALEY, P. S.
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
DALLAS, J.
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
DALLOSTA, P. M.
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079
DALTON, C.
Potential flow around axisymmetric bodies - Direct and inverse problems
p0223 A78-26230
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
DALY, K.
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
DANFORTH, E. C. B.
Correlation of wind-tunnel and flight-test data for the Lockheed L-1011 Tristar airplane
p0436 N78-26094
DANIEL, D. E.
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
DANIELS, M. R., JR.
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
DANIELSON, E.
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099
DANIELSSON, S.-G.
Gas path analysis applied to pre and post overhaul testing of JT9D turbofan engine
[SAE PAPER 770993] p0180 A78-23829
DANNHAUER, G.
Lighting in airport terminals
p0072 A78-16279
DARRELL, W. K.
A study of the F-4 Program Management Responsibility Transfer (PMRT) from the Air Force Systems Command to the Logistics Command
[AD-A052903] p0413 N78-25974
DARTER, M. I.
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170
DAS, B. M.
Nondestructive pavement evaluation
[AD-A052707] p0400 N78-24159
DASH, S. M.
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
DAT, R.
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
DAVARI, B.
Effect of a nonconstant C/m-alpha/ on the

stability of rolling aircraft
p0071 A78-16180
DAVENPORT, E. E.
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
DAVENPORT, F. J.
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
DAVID, M. Y.
Automation in transportation in 1990
p0416 A78-40867
DAVIDENKO, M. V.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
DAVIDSON, A. F.
The principles of underwater escape from aircraft
[AGARD-AG-230] p0094 N78-13032
DAVIDSON, C. D.
Development of fiber shields for engine containment
p0026 N78-10079
DAVIDSON, G. H.
An identification and characterization of cost models/techniques used by Air Force Logistics Command to estimate jet engine operation and support costs
[AD-A044083] p0088 N78-12095
DAVIDSON, J.
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
DAVIES, A. E.
AIDS in engine management programmes
p0510 A78-47865
DAVIES, D. E.
Theoretical determination of subsonic oscillatory airforce coefficients
[APC-R/M-3804] p0359 N78-23067
DAVIES, L.
Performance implications of some recent advances in weapon carriage research
p0435 N78-26081
DAVIES, R. E.
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
DAVIES, V.
Nairobi's future has begun
p0339 A78-35275
DAVIN, A.
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
DAVIS, C. G.
An evaluation of the capability of the logistics composite model to project the monthly aircraft sortie effectiveness of an F-15 wing
[AD-A047227] p0193 N78-15993
DAVIS, E.
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
DAVIS, F. G.
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
DAVIS, G. W.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
DAVIS, J.
Heavy lift helicopter flight control system. Volume 3: Automatic flight control system development and feasibility demonstration
[AD-A050059] p0324 N78-21164
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
DAVIS, J. A.
Sensor technology for turbine engine monitoring systems
[AIAA PAPER 78-1474] p0513 A78-47920
DAVIS, J. M.
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115
Limitations of the UTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
DAVIS, M. E.
Ku Band linear phased array
p0003 A78-11821
DAVIS, S.
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
DAVYDOV, A. B.
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
DAVYDOV, P. S.
Aircraft radar systems
p0377 A78-37873
DAVYDOVA, N. A.
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
DAWSON, D. D.
Improving readiness: A cost-effective approach
[AD-A050765] p0345 N78-22021
DAY, I. J.
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091
DAZZO, J. J.
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
DE CREMIERS, M.
ALIDADE - The alignment on board aircraft carriers of the inertial navigation units of Super-Etendard aircraft
p0217 A78-25149
Alignment of inertial navigation units on the Super-Etendard aircraft carrier
p0342 A78-35895
DE HOFF, R. L.
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
DE KRASINSKI, J. S.
Boundary layer blowing tests on a radial diffuser in low and subsonic Mach range
p0374 A78-37411
DE MUIZON, M.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
DE SILVA, B. M. E.
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
DE SILVA, C. W.
Failure state detection of aircraft engine output sensors
p0184 A78-23906
DEAL, P. L.
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
DEAN, A.
Project SQUID
[AD-A047076] p0199 N78-16056
DEAN, R. S.
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045

DEANGELIS, V. M.
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface
p0605 N78-32058
DEAVIES, E. G.
The Navstar Global Positioning System /GPS/
p0594 A78-52952
DECKER, J. P.
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
DECKERT, J. C.
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data
[AIAA 77-1506] p0007 A78-12252
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
DECKERT, W. H.
Moving V/STOL from technology to system
p0075 A78-16693
DEEL, O.
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213
DEEP, R. A.
Some applications of a test track for aerodynamic testing
[AIAA PAPER 78-167] p0160 A78-20719
DEETS, D. A.
Optimal regulator or conventional? Setup techniques for a model following simulator control system
p0357 N78-23020
DEGRAAF, E. A. B.
Application of failure analysis in aviation
[NLR-MP-77002-U] p0145 N78-14449
Preliminary investigation into the application of magnetic rubber inspection (M.R.I.)
[NLR-TR-76083-U] p0445 N78-26507
DEGTIAREV, G. L.
Optimal control synthesis in distributed systems with incomplete information
p0518 A78-48215
DEHOFF, R. L.
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145
DEIWERT, G. S.
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
DEJARNETTE, F. R.
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
DEJIMA, T.
New model VOR/DME
p0373 A78-37246
DEJONGE, J. B.
Fatigue design of fighters; guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft: General survey
p0241 N78-18047
Fatigue load monitoring
p0242 N78-18052
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
DEL BALZO, J. M.
ATC in the year 2000
p0596 A78-52978
DELABUNTY, A.
AIDS in military aircraft
p0510 A78-47866
DELANEY, A. J.
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327
DELANEY, B. T.
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
Remote sensing of aircraft wake vortex movement in the airport environment
[APCA PAPER 77-41,4] p0220 A78-25385
DELANEY, C. L.
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
DELAURIER, J.
Lateral-aerodynamic characteristics of highly-dihedraled wings
p0523 A78-49334
DELEEUW, J. H.
Research on various aspects of atmospheric flight
[AD-A033681] p0302 N78-20088
DELFOSSE, R. J.
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417
DELGROSSO, E. J.
Holographic inspection of jet engine composite fan blades
[SAE PAPER 770975] p0179 A78-23819
DELHAYE, J.-Y.
Methodology for optimizing an air fleet
p0116 A78-18668
DELOACH, R.
Integrity in flight control systems
p0182 A78-23873
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
DELUCCIA, J. J.
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197
DELUCIA, R. A.
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105
DEMARCHI, J. N.
Flight testing an 8000 psi Lightweight Hydraulic System
[SAE PAPER 771007] p0181 A78-23839
DEMARTINO, K. A.
EAR navigation update modes
p0066 A78-15667
DEMIDOVICH, V. M.
Investigation of the heat regime of gas turbine engine bearings
p0598 A78-53431
DEMIN, V. S.
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
DEMMY, W. S.
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
DEMOSS, D. M.
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281

DENOTT, L. R.
TF41-A-2/A7E inflight engine condition monitoring system /IECMS/
[AIAA PAPER 78-1472] p0513 A78-47918
DENAGEL, S. P.
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
DENARO, R. P.
Navstar GPS field test results
p0530 A78-49856
DENDY, J. C.
YAH-64 advanced attack helicopter design tradeoffs
[SAE PAPER 770950] p0178 A78-23801
DENERY, D. G.
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
DENKSCHERZ, H.
Display systems and cockpit design
p0550 N78-30116
DENN, F. M.
Plotit-method of interactively plotting input data for the vorlax computer program
[NASA-CR-158896] p0495 N78-28830
DENNING, R. M.
The aircraft ducted fan
p0286 A78-31153
Energy conserving aircraft from the engine viewpoint
p0287 A78-31310
DENSMORE, J. E.
Results of Concorde monitoring
p0340 A78-35655
DENTON, W. R.
Flight deck display trends
p0510 A78-47899
DEPONTE, M., JR.
An extended Kalman filter fire control system against air-to-air missiles, volume 2
[AD-A055637] p0610 N78-32091
DEPRIEST, C. D.
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
DERBYSHIRE, K.
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
DERKACH, G. M.
Economic problems of determining the durability of aircraft engines
[AD-A044672] p0088 N78-12096
DERKACZEW, A.
Tribological tests involved in designing aircraft brakes
p0327 A78-32647
DEROIDE, B.
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
DESAI, M. N.
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data
[AIAA 77-1506] p0007 A78-12252
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
DESHPANDE, R. B.
An experimental study of boundary layer transition on a caret wing at hypersonic speeds
p0417 A78-41029
DESJARDINS, R. A.
Helicopter rotor vibration isolation
p0524 A78-49399
DESMARAIS, R. N.
User's guide for a modular flutter analysis software system (fast version 1.0)
[NASA-TM-78720] p0492 N78-28101
DESOPPER, A.
Research on unsteady turbulent boundary layers
p0146 N78-14992
DESTUYNDER, R.
The ONERA position on the use of feed-back control against flutter due to external wing-mounted stores
[ONERA, TP NO. 1977-101] p0192 A78-24461
Flutter suppressor for transonic flight
[ONERA, TP NO. 1978-102] p0508 A78-47346
Wind tunnel study of an active flutter suppression system
p0046 N78-11974
DEVITT, D. P.
A method of predicting stress corrosion cracking
p0468 A78-44105
DEVOE, D.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
DEVRIESE, J.
The improvement of various engine installation components in a subsonic transport aircraft
p0057 A78-15022
Amelioration of various components of a subsonic transport aircraft engine
[AAAP-NT-77-31] p0353 N78-22109
DEXTER, P. F.
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
DEY, D.
Use of and experience with simulation in the development of the VFW 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942
DEYST, J. J.
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data
[AIAA 77-1506] p0007 A78-12252
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
DEYST, J. J., JR.
Highly survivable integrated avionics
p0523 A78-49163
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
DI BLASI, A.
The influence of engine position on aircraft noise
p0121 A78-19083
DI CUONZO, S.
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
DI TOMMASO, S.
Supersonic axial compressors with predeceleration by oblique shocks
p0119 A78-19045
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
DIAMOND, D. D.
Stator rotor tools
[NASA-CASE-MSC-16000-1] p0402 N78-24544
DICKERSON, J. W.
ATE and avionics display systems
p0417 A78-40924
DICKINSON, R. M.
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391
DICKISON, G. J.
Advanced Tactical Air Combat Simulation /ATACS/ - An overview of Project 2363
[AIAA 78-1580] p0579 A78-50661
DICKSON, B. E.
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
DICOLA, A.
Use of simulation techniques in the problem of air traffic control
[QUAD-CALC-ELETT-21] p0395 N78-24111
DICRISTINA, V.
Hypersonic heat transfer test program in the VKI longshot facility
[AD-A050295] p0302 N78-20086
DIEHL, J. J.
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
DIEHL, L. A.
Reduction of aircraft gas turbine engine pollutant emissions - A status report
p0480 A78-45429

Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067
Stratospheric cruise emission reduction program
p0040 N78-11077
Reduction of aircraft gas turbine engine pollutant emissions
[NASA-TM-78870] p0351 N78-22098
Gas turbine engine emission reduction technology program
p0447 N78-27058
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
DIEKMANN, V. L.
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
DIETERLY, D. L.
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
DIETRICH, D. A.
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
DIETZ, W. E., JR.
Experimental investigation of support interference on an ogive cylinder at high incidence
[AIAA PAPER 78-165] p0160 A78-20717
DIGUMARTHI, R. V.
Use of leaning vanes in a two stage fan
[NASA-CR-152134] p0319 N78-21115
DIJAK, J. T.
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
DILKS, K. R.
Management of software development for advance ATC systems
p0595 A78-52961
DILL, H. D.
Effect of fighter attack spectrum on crack growth
[AD-A042369] p0037 N78-11054
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations
[AD-A042785] p0206 N78-17044
DILLE, J. R.
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
DILLON, J. L.
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
DILS, R. R.
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
DINI, D.
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
DISOTELL, M. A.
Structural material trends in commercial aircraft
[AIAA PAPER 78-1552] p0482 A78-46515
DISTELHORST, T. E.
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
DITMAN, A. O.
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
DITTMAR, J. H.
A parametric investigation of an existing supersonic relative tip speed propeller noise model
[NASA-TM-73816] p0102 N78-13854
DIVAN, P.
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043
DIVAN, P. E., III
Aerodynamic optimization and analysis as part of the computer-aided design process
[AIAA PAPER 78-97] p0172 A78-22572
DIVER, C.
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896
DIX, R. E.
Influences of sway braces and mounting gaps on the static aerodynamic loading of external stores
[AD-A054963] p0607 N78-32068
DIXON, C. J.
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
DMITRIEV, A. K.
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
DMITRIEV, I. S.
The helicopter as a control object
p0276 A78-29401
DMITRIEV, V. A.
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
DMITRIEVA, V. B.
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
DOBBS, J. D.
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
DOBBS, M. W.
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
DOBBS, S. K.
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129
DOBEK, L. J.
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
DOBROVOLSKII, A. V.
Calculation of a double-thread groove seal
p0132 A78-20290
DODDS, W. J.
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
DODGE, F. J.
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
DODGE, P. R.
Transonic relaxation methods
p0011 A78-12299
DODGE, R. N.
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
DODS, J. B., JR.
An analysis of the rotor blade stresses of the

three stage compressor of the Ames Research Center 11- by 11-foot transonic wind tunnel
[NASA-CR-152083] p0209 N78-17061
DOELER, H.
Flight measurement of aircraft onboard antennas
p0115 A78-18504
DOGGETT, R. V., JR.
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
DOHERTY, J. E.
NDE: A key to engine rotor life prediction
p0027 N78-10087
DOLGINTSEVA, G. IA.
Observational computation in the case of redundant measurements
p0176 A78-23133
DOLGUSHEV, G.
The technical conception of the IL-62M. VII - Landing flap control
p0051 A78-13503
The technical concepts behind the IL-62M /8/ landing gear
p0371 A78-36622
DOLLYHIGH, S. M.
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
DOLTON, B.
Simulation as a routine tool for resource and workload planning
p0052 A78-13850
DOMAS, P. A.
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101
DOMINGUEZ RODRIGUEZ, L.
Operational regularity in air transport
p0525 A78-49449
DONALDSON, C.
Viscous effects in aircraft trailing vortices
p0080 N78-12019
DONATO, R. J.
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
DONIN, R. B.
British Airways v. Port Authority - Its impact on aircraft noise regulation
p0582 A78-51128
DONOGHUE, P. J.
System description and performance characteristics of a quad redundant strapdown inertial navigation and flight control system
p0065 A78-15641
DONOVAN, R. F.
The Sikorsky S-76 program
p0263 N78-19139
DOOLEY, M. P.
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
DORFMAN, J. R.
Thirty years of fluid dynamics
p0585 A78-51280
DOSANJH, D. S.
Prospects for supersonic jet noise suppression
p0329 A78-33089
DOST, K.-H.
The ZTL/KEL program in the preliminary phase of future military projects
p0470 A78-44618
DOSTAL, G.
The ZTL/KEL program in the preliminary phase of future military projects
p0470 A78-44618
DOUGHERTY, J. J., III
Research requirements to improve reliability of civil helicopters
[NASA-CR-145335] p0316 N78-21093
DOUGHERTY, N. S., JR.
A study of acoustic disturbances and means of suppression in ventilated transonic wind tunnel walls
[AD-A045347] p0100 N78-13080
DOUGLAS, B. E.
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
DOW, J. P.
Let's put fuel efficiency into perspective
p0508 A78-47269
DOWNING, J. R.
A systems approach to heliport lighting
p0523 A78-49238
DOYLE, L. B.
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903
DOYLE, V. L.
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report
[NASA-CR-152076] p0271 N78-19899
DOYON, L. R.
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
DRABKIN, V. V.
Automatic control of airplanes and helicopters
p0015 A78-12849
DRAGO, R. J.
Engineering services to conduct qualification testing of precision forged spiral bevel gears
[AD-A051542] p0366 N78-23438
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
DRAKE, M. D.
FAA lightning protection study: Lightning protection requirements for Wilcox Mark I/D instrument landing system
[AD-A043907] p0036 N78-11044
DRAKE, M. L.
An example of additive damping as a cost savings alternative to redesign
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
DRAKE, W.
Unique test capabilities of the Eglin AFB McKinley Climatic Laboratory
p0291 A78-32127
DRANE, C.
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
DRAPIER, J. M.
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
DRAUDIN, H.
COMPUTROL - A new technique in image generation
[AIAA 78-1579] p0579 A78-50660
DRESSLER, G. J.
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
DREVET, J.-P.
The influence of runway irregularities on the dynamic behavior of aircraft at takeoff
[ONERA, TP NO. 1977-147] p0003 A78-12034
DREW, D. A.
The force on a small sphere in slow viscous flow
p0591 A78-52175
DREXHAGE, H.
Civil components program "Wing Section'. Preliminary design of engine mounting
[BMFT-FB-W-77-28] p0350 N78-22086
DREXLER, J.
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
DREYFUSS, D. J.
Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100

DRIGGERS, H. H.
Sensitivity studies for several high performance VSTOL concepts
[SAE PAPER 770982] p0180 A78-23822
DRIVER, C.
Progress in supersonic cruise aircraft technology
[NASA-TM-78695] p0358 N78-23047
DROBIAZKO, B. S.
Unsteady fluid flow in a swirl injector
p0581 A78-50781
DROGIN, E. M.
Digital system architecture for a 1980's jammer
p0537 A78-49973
DROR, B.
Computer aided design of aircraft electrical systems
p0479 A78-45410
DRUKER, I. G.
Pulse tubes for aerodynamic studies
p0415 A78-40298
DRUZHININ, L. N.
Optimal control of aircraft powerplant
p0597 A78-53119
DUBOIS, L. G.
The ARTS III Umbrella - Concepts and applications
p0594 A78-52958
DUBROVSKAIA, L. I.
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441
DUDUCHAVA, R. V.
Uniqueness theorem for an integral equation of a rectangular thin-section wing
p0130 A78-20201
DUE, H. F., JR.
Expendable design concept
[AIAA PAPER 78-964] p0463 A78-43523
DUERR, W.
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
DUFFY, H. A.
General aviation dynamics
p0428 A78-43041
DUFFY, V.
In-flight measurement of aircraft acoustic signals
p0105 A78-17364
DUGAN, J. F.
Status of advanced turboprop technolcgy
p0447 N78-27055
DUGANOV, V. V.
Calculations of flows in flat asymmetric nozzles for overexpanded conditions
p0581 A78-50782
DUGRANRUT, J.
Aircraft Satellite Data Link
p0338 A78-34971
DUKE, G. A.
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
DUKE, L. C.
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
DUKEK, W. G.
Alternative hydrocarbon fuels for aviation
p0060 A78-15400
DULLER, C. E., III
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
DUMAIS, P. J.
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
DUMANIAN, J.
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
DUNAEV, E. V.
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
DUNBAR, D. N.
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
DUNBAR, W. G.
High-voltage power supply problems and design techniques
p0065 A78-15654
DUNDERDALE, T. C.
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
DUNHAM, J.
Intake design for fighter aircraft
p0549 N78-30110
DUNHAM, R. E., JR.
Unsuccessful concepts for aircraft wake vortex minimization
p0080 N78-12023
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
DUNLAP, D.
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
DUNLAY, W. J., JR.
Tandem-queue algorithm for airport user flows
p0284 A78-30677
Airport improvement task force delay study: Delay model validation plan
[AD-A048112] p0211 N78-17077
DUNLEAVY, R. M.
V/STOL presentation
p0109 A78-17880
DUNMYER, W. D.
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118
DUNN, F. K.
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085
DUNN, H. J.
A moving window parameter adaptive control system for the F8-DFBW aircraft
p0013 A78-12361
DUNN, K.
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043
DUNN, K.-P.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
DUNN, M. G.
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071
DUNN, W. R., JR.
Aircraft attitude measurement using a vector magnetometer
[NASA-CR-155565] p0207 N78-17050
Evaluation of STOL navigation avionics
[NASA-CR-155566] p0208 N78-17051
DUNNING, S. J.
Infrared receiver performance

p0538 A78-49985
DUNSWORTH, L. C.
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
DUPUIS, T. A.
Simultaneous sensor-presentation techniques study
[AD-A043355] p0024 N78-10066
DUPUY, M. J.
The new railroad artery Paris-Sud-Est and high-speed trains: How the Paris Sud-Est was born - Basic options
p0219 A78-25263
DURANDO, N. A.
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
DURENBERGER, D.
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
DURENBERGER, D. W.
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
DURHAM, D. L.
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
DURKIN, J. M.
Dynamic response of lift fans subject to varying backpressure
[AIAA PAPER 78-756] p0292 A78-32176
DUROCHER, C. L.
The effect of radar disturbances on aircraft runway arrival time in a four-dimensional navigation terminal approach
[AIAA 77-1512] p0007 A78-12257
DURVASULA, S.
Rocket structures
p0612 N78-32123
DUSTIN, M. O.
Mechanical characteristics of stability-bleed valves for a supersonic inlet
[NASA-TM-X-3483] p0098 N78-13063
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control
p0605 N78-32062
DUSTO, A. R.
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
DUTOYA, D.
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
DUTTA, S.
Ceramics in gas turbine: Powder and process characterization
[NASA-TM-73875] p0208 N78-17059
DUTTWEILER, R. E.
Materials and manufacturing processes for increased life/reliability
p0027 N78-10086
DUVALL, T. J.
A study of opportunistic replacement tactics for modular jet engine management
[AD-A044184] p0079 N78-12001
DVORAK, F. A.
An analysis method for the viscous flow over circulation-controlled airfoils
[AIAA PAPER 78-157] p0160 A78-20710
DVORETSKII, V. M.
Effect of nozzle shape on characteristics of three-dimensional subsonic and supersonic flows
p0168 A78-21093
DWYER, J. P.
Certifying the Learjet to 51,000 feet
p0234 A78-28462
DYAKONOV, V. S.
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
DYNES, R. S.
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
DZYGADLO, Z.
Dynamic model of a deformable aircraft for natural vibration analysis by the finite element method
p0108 A78-17636
Analysis of lateral dynamic stability of an airplane with deformable control systems. II - Numerical analysis
p0108 A78-17642
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
Remarks on design of supersonic wind tunnels
p0369 A78-36216
Dynamics of the longitudinal motion of an airplane with a variable-geometry wing
p0523 A78-49285

E

EAGLE, C. D.
Lightweight, low compression aircraft diesel engine
[NASA-CR-135300] p0325 N78-21471
EARLS, D. L.
Development of a combined environment test for reliability assessment of avionics systems
p0061 A78-15561
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
EARP, R. L.
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
EASTERLING, L. R.
Stress analysis of ceramic turbine blades by finite element method, part 1
[AD-A056310] p0629 N78-33111
EATON, R. M.
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
EAVES, J. L.
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
EBCIOGLU, I. K.
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
EBELING, P.
Technical evaluation of flying weapon systems
[RAE-LIB-TRANS-1948] p0560 N78-31087
EBERLE, A.
Transonic potential flow computations by finite elements - Airfoil and wing analysis, airfoil optimization
[DGLR PAPER 78-065] p0477 A78-45227
A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081
EBERLE, W. R.
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
EBERT, H.
The technology for the automatic tracking of targets of surveillance and secondary radar
p0073 A78-16377
EBERT, P. M.
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
EBNER, R. E.
Flight-control/navigation inertial reference system
p0065 A78-15642
EBSTEIN, A. R.
Gas turbine module performance analysis
[SAE PAPER 770992] p0180 A78-23828
ECKARDT, D.
Improvements in the calculation of the centrifugal compressor flow by experimental study of the complex rotor flow

[DGLR PAPER 77-062] p0117 A78-18707
Investigation of the jet-wake flow of a highly loaded centrifugal compressor impeller
[NASA-TM-75232] p0198 N78-16051
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller
[DLR-FB-77-32] p0245 N78-18073
ECKERT, E. R. G.
Film cooling of a gas turbine blade
p0573 A78-50580
ECKERT, K. D.
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0433 N78-26069
ECKERT, W. T.
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
ECKSTROM, C. V.
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
ECONOMU, M. A.
Air speed and attitude probe
[NASA-CASE-FRC-11009-1] p0408 N78-25088
EDELMAN, R. B.
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
Mixing and combustion in high speed air flows
[AD-A054398] p0503 N78-29188
EDENBOROUGH, H. K.
Tilt-proprotor perspective
p0075 A78-16694
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
EDGE, A. G.
Improved passenger flow through simulation
p0570 A78-50437
EDMONDS, J. D.
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
EDMUNDS, D. B.
Modular engine maintenance concept considerations for aircraft turbine engines
[SAE PAPER 770991] p0180 A78-23827
EDSON, R.
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
EDWARDS, C. L. W.
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
EDWARDS, J. A.
A hierarchical network for avionic systems
p0532 A78-49868
EDWARDS, J. W.
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
Unsteady aerodynamic modeling and active aeroelastic control
p0199 N78-16061
EDWARDS, R. H.
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
EDWARDS, R. M.
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport
[TT-7705] p0556 N78-30910
EDWARDS, W. T.
Bearingless tail rotor loads and stability
[AD-A049579] p0317 N78-21098
EFREMOV, I. I.
Unsteady incompressible flow past thin porous airfoils
p0427 A78-42918
EFREMOV, N. L.
Computation of the base pressure in ejector nozzles of different length with zero coefficient of ejection
p0168 A78-21098
EGAN, D. E.
Human factors engineering for head-up displays: A review of military specifications and recommendations for research
[AD-A056944] p0627 N78-33099
EGAN, W. J.
Design and verification of a turbofan Swirl augmentor
p0572 A78-50564
EGAN, W. J., JR.
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
EGGEBRECHT, R.
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
EGGERS, J. M.
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
EGGLESTON, B.
Prospects for energy conserving STOL transports using prop-fans
p0286 A78-31303
EHERNBERGER, J.
The YF-12 gust velocity measuring system
p0605 N78-32061
EHLERS, F. E.
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
A Mach line panel method for computing the linearized supersonic flow over planar wings
[NASA-CR-152126] p0450 N78-27087
EHN, G.
Transonic wind tunnel tests on two-dimensional aerofoil sections. Determination of pressure distribution and drag for an aerofoil with a modified NACA 65 sub2-215 section in FFA wind tunnel S5, part 2
[FFA-TN-AU-725] p0313 N78-21062
EHRICH, R. D.
Strapdown seeker guidance for tactical weapons
p0534 A78-49928
EICHELBERGER, J. L.
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273
EICHHORN, R.
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635
EICHLER, J.
Dynamic analysis of an in-flight refueling system
p0333 A78-34015
EICHLER, R.
The problem of the acoustic properties of the propeller and Q-fan type blower with regard to exterior and interior noise in transport aircraft
p0283 A78-30358
EIDEN, G. L.
General aviation dynamics
p0428 A78-43041
EIGENMANN, M. F.
Development of the propulsion simulator - A test tool applicable to V/STOL configurations

[SAE PAPER 770984] p0180 A78-23823
EIJSINK, H.
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
EILERTSON, W. H.
The XBQM-108A vertical attitude takeoff and landing vehicle
[AD-A044754] p0085 N78-12074
EINBINDER, L. W.
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655
EISEN, F. S.
Gas turbine engine fuel from synthetic crude
p0461 A78-43416
EISENHUTH, J. J.
Research on the statically thrusting propeller
[NASA-CR-157214] p0409 N78-25092
EISWERTH, J. E.
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
EL-GAMAL, H. A.
Experiments on the laminar flow in a rectangular streamwise corner
p0600 A78-53765
EL-TAHER, R. M.
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
ELANTSEV, A. A.
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
ELBAUM, J. K.
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
ELBER, W.
Recent developments in analysis of crack propagation and fracture of practical materials
[NASA-TM-78766] p0556 N78-30606
ELCHURI, V.
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
ELDRED, K. M.
Aircraft noise control
p0015 A78-12814
ELDREDGE, D.
The role of cockpit simulators in the integration of pilot/controller ATC system related avionics and procedures
[AIAA 77-1516] p0010 A78-12284
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
ELENEVSKII, D. S.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
ELEZOVA, T. S.
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
ELIRAZ, Y.
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
ELIZAROV, V. I.
Basic problem of control of the motion of a non-Newtonian fluid in a gap
p0292 A78-32257
ELIZAROV, V. S.
Method of calculating the landmark density of aeronautical charts
p0475 A78-45124
ELLERMEIER, W.
Minimisation of relaxation drag
p0374 A78-37423
ELLINWOOD, J. W.
Linearized Newtonian aerodynamics of slender inflated cones
[AD-A048695] p0254 N78-19064
ELLIOT, R. D.
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
ELLIOTT, J. R.
NASA's advanced control law program for the F-8 digital fly-by-wire aircraft
p0013 A78-12357
ELLIOTT, S. Y.
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
ELLIS, D. H.
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
ELLIS, D. W.
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
ELLISON, T. A.
Airline viewpoint on systems development and integration
[AIAA 77-1496] p0006 A78-12244
ELLSWORTH, J. A.
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
ELMORE, G. A.
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
ELROD, B. D.
Satellite-aided ATC system concepts employing the Navstar Global Positioning System
[M77-59] p0111 A78-17903
ELY, W. L.
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
EMALIANOVA, G. N.
Turbulent boundary layer on a moving surface
p0163 A78-20850
EMBLETON, T. F. W.
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
EMERSON, R.
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
EMMERSON, D. C.
An economic and technical perspective of the turboprop engine in Ag-aviation
p0375 A78-37536
EMMERT, R. I.
Bank-to-turn /BIT/ autopilot technology
p0534 A78-49927
EMONT, M.
Studies on reinforced plastics
[AAAF-NT-77-40] p0355 N78-22240
EMRICH, R. J.
Thirty years of fluid dynamics
p0585 A78-51280
ENSTAD, P. J.
Access study and simulation of the Marots communication system
p0226 A78-27027
ENDERS, J. H.
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
Overview of safety research
p0497 N78-29054
ENDO, E.
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375

ENDO, M.
Research and development of digital jet-engine controls
p0578 A78-50626
ENGEL, H. E.
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
ENGLAND, G. R.
Shop test success is a function of the airborne system design
p0068 A78-15699
The digital airplane
p0126 A78-19547
ENGLAR, R. J.
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
ENGLIN, B. A.
Increasing the resources of jet fuels
p0003 A78-11699
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
ENGLUND, D. R.
Global atmospheric sampling program
p0040 N78-11076
ENIS, C. P.
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
ENZAKI, Y.
Properties and evaporation of jet-engine fuels at pressurized conditions
p0574 A78-50594
EPIFANOV, V. M.
Some problems of GTE blade transpiration cooling
p0049 A78-13166
EPPLER, R.
Turbulent airfoils for general aviation
p0188 A78-24364
EPTON, M. A.
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
ERBACHER, H.
Design problems associated with the B-1 Composite Horizontal Stabilizer
p0109 A78-17890
ERBEN, E.
Application of skin technology to turbine blades
[AIAA PAPER 78-285] p0163 A78-20792
ERDEL, K.
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976
ERDMANN, F.
New aspects in the movement simulation of the research flight simulator of DFVLR
[DGLR PAPER 77-086] p0290 A78-31950
ERDOS, J.
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
ERESMAN, B.
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
EREZA, A. G.
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
ERIC, W.
Computer aided design of aircraft electrical systems
p0479 A78-45410
ERICKSON, G. E.
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
ERICKSON, J. C., JR.
Experiments on supercritical flows in a self-correcting wind tunnel
p0295 A78-32345
ERICSON, L. E.
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057
ERICSSON, L. E.
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
ERIKSON, W. J.
RIM: A prototype for a relational information management system
p0635 N78-33785
ERIKSSON, R. H.
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
ERM, L.
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104
ERMAK, IU. N.
Hypersonic flow of a viscous gas in a nozzle
p0127 A78-19651
ERMAKOV, A. L.
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
ERMOLENKO, S. D.
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251
Modeling the influence of the ground effect on the aerodynamic characteristics of a wing by means of a flat screen of finite dimensions
p0174 A78-22634
Modeling ground plane influence on wing aerodynamic characteristics using a finite plane screen
p0518 A78-48216
ERNOLIN, N. E.
Entropy layer in two-dimensional flows
p0168 A78-21132
ERNSHAUS, R.
The low-speed air tunnel of the Institute of Hydromechanics at the University of Karlsruhe
p0176 A78-23297
ERNANI, P.
Some preliminary considerations on stratospheric and mesospheric circulation with regard to the analysis of the stratospheric warming of December 1976-January 1977
p0585 A78-51338
ERNOULT, M.
Metrology of aircraft overflight noise. Errors due to its nonstationary character
p0358 N78-23038
ERNST, B. F.
UHF DF triangulation system for control and guidance of military aircraft
p0315 N78-21077
ERNST, H. L.
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
ERNST, R. C.
Low frequency augmentor instability study
[AIAA PAPER 78-996] p0464 A78-43543
Low frequency combustion instability in augmentors
p0321 N78-21138
ERNSTOFF, M. N.
Advanced Head-Up Display technology - The Integrated HUD
p0067 A78-15671
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062
EROFEEV, A. I.
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857
EROSHENKO, V. M.
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
ERSHOV, V. M.
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794

EBTELT, H. J.
Analysis and synthesis of operational loads
[ISD-193] p0310 N78-20551
EBZBERGER, H.
Optimum horizontal guidance techniques for aircraft
p0356 N78-23016
Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072
ESAULOV, S. IU.
The helicopter as a control object
p0276 A78-29401
ESCHNER, I.
Protective equipment for cargo transport in passenger cabins
p0051 A78-13501
ESCOFFIER, H.
Sounding the runway
p0582 A78-50822
ESHELBY, M. E.
An analysis of the force system of a propeller
[CRANFIELD-AERO-33] p0147 N78-15003
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
ESSEX, N. J.
Concorde AIDS - Powerplant applications
[SAE PAPER 770995] p0181 A78-23831
ESSLINGER, M.
Problems of the theory of strength related to aircraft construction and civil engineering; Structural Mechanics Meeting, Ottobrunn, West Germany, June 1, 2, 1977, Lectures and Discussion Contributions
p0382 A78-38802
ETENKO, A. F.
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
ETHRIDGE, M. M.
Geometric restitution of single coverage aircraft multispectral scanner data
p0280 A78-29854
Analysis of single and double coverage aircraft multispectral scanner arrays for positional data
p0267 N78-19553
ETLIK, T.
Influence of structural components of a by-pass engine on its flight characteristics
p0277 A78-29582
ETSCHMAIER, M. M.
Aircraft maintenance scheduling
p0052 A78-13849
ETTINGER, R. C.
F-16 flight test progress report
p0232 A78-28452
ETTLES, E. M. MCC.
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
EULRICH, B. J.
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
EUSEPI, M.
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
EVANS, D. G.
An overview of aerospace gas turbine technology of relevance to the development of the automotive gas turbine engine
[NASA-TM-73849] p0098 N78-13062
EVANS, R. L.
Boundary layer development on axial-flow turbomachinery blading
p0468 A78-43863
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
EVANS, R. M.
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
EVELYN, G. B.
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
EVEN ZUR, I.
Problems of noise certifying business aircraft
p0015 A78-12824
EVERETT, W. D.
A test using simulated mission profile environments
p0291 A78-32126
EVERHART, J. L.
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
EVERITT, K. W.
Some measurements in two-dimensional turbulent wakes
p0289 A78-31836
EVERTZ, E.
Localization and shielding of noise sources generated by the interaction of free jets with flat surfaces
[DGLR PAPER 77-049] p0191 A78-24438
EVERY, M. G.
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
EVES, J.
Advanced composite bulkhead concepts for wing-to-fuselage trunnion joints
p0077 A78-16907
EWALD, B.
Aircraft performance improvement through retrofitting of winglets
[DGLR PAPER 77-031] p0190 A78-24422
The future of wind tunnel technology in Germany
[NASA-TM-75244] p0364 N78-23106
EWART, R. B.
Time delay measurements for flight simulators
p0381 A78-38788
EWING, M. S.
Quiet propeller/rotor concept evaluation
[AD-A047297] p0197 N78-16047
EWINS, D. J.
Studies to gain insight into the complexities of blade vibration phenomena
p0058 A78-15175
EYLON, D.
Fatigue crack propagation of titanium alloys under dwell-time conditions
p0387 A78-39596
EYSINK, H.
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078

F

FA, W. C.
Suspension fuels. One type of hopeful high energy fuel
[AD-A045908] p0153 N78-15294
FABER, B.
Optimization of quasi-stationary long distance flights in the case of different directions for conducting the flight according to a model which has been idealized to a large extent
p0589 A78-51749
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076
FABRY, H. F.
The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
FABRY, H. F., JR.
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
FALCO, L.
Erosion resistant coatings
p0120 A78-19056
FAN, C.
Aeronautical knowledge, selected articles
[AD-A051710] p0367 N78-23986
FANNING, A. E.
Comparison of nozzle and afterbody surface

pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Advance nozzle technology
p0550 N78-30111

FANT, J. A.
An advanced composite wing for the F-16
p0077 A78-16920

FANT, K.
Autothreshold autoscreener/FLIR system
p0538 A78-49984

FANTUZI, A.
Feasibility of landing at an alternate airport due to visibility conditions
p0585 A78-51341

FARASSAT, F.
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834

FARBRIDGE, J. E.
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304

FARINACCI, N. A.
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053

FARLEY, J. F.
Launching the Harrier from a ski jump
p0234 A78-28463

FARMER, M. G.
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128

FARN, C. L.
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297

FARRELL, J. L.
Keeping pace with avionics innovations
p0069 A78-15712
Air-to-air designate/track with time sharing
p0538 A78-49977

FARRINGTON, J. G.
An optical fibre, multi-terminal data system for aircraft
p0202 N78-16849

FARROW, G.
Interavia combat aircraft design analysis. I - Dassault-Breguet Mirage 2000
p0328 A78-32850

FARSSHMAN, G. E., JR.
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070

FASANELLA, E. L.
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052

FASSBENDER, E.
Nondestructive testing of adhesive bonded structure
p0480 A78-45937

FAULKNER, W. H.
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791

FAVIER, D.
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061

FEARN, R. L.
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392

FEATHERSTONE, D. H.
Analog to digital airplanes - One easy step
[AIAA 77-1469] p0005 A78-12228

FEDCHUN, L. V.
Numerical calculation of magnetic levitation systems
p0600 A78-53805

FEDERSPIEL, J. F.
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100

FEDOROV, S. M.
Automatic control of airplanes and helicopters
p0015 A78-12849

FEDOTOV, B. N.
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245

FEDYAYEVSKIY, K. K.
Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387

FEEHAN, R. J.
UTTAS/HLH rotor blade fabrication and testing
p0050 A78-13456

FEHER, K.
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070

FEHER, R. E.
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088

FEIL, G.
Tornado development simulation
p0417 A78-41025

FEILER, C. E.
Propulsion systems noise technology
p0447 N78-27056

FEISTEL, T. W.
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787

FEJER, A. A.
Visual study of oscillating flow over a stationary airfoil
p0337 A78-34845

FELDMAN, K.
Nickel/cadmium aircraft batteries: Battery alarm unit
[AD-A039521] p0310 N78-20631
Nickel/cadmium aircraft batteries: Rapid electrolyte exchange technique
[AD-A039335] p0311 N78-20632
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter
[AD-A039735] p0311 N78-20636

FELT, L. E.
Close encounters of the aeroservoelastic kind
[AIAA 78-1289] p0542 A78-50196

FENAUGHTY, R. R.
Sikorsky YUH-60A UTTAS helicopter flight test program
p0125 A78-19449

FENDER, J. R.
Material evaluation of polyurethane foam, 0.05 g/cm 3 density
[BDX-613-1836-REV] p0567 N78-31249

FENNELL, L. J.
Vortex breakdown. Some observations in flight on the HP 115 aircraft
[ARC-R/M-3805] p0359 N78-23068

FENTON, D. L.
Turbine engine particulate emission characterization, phase 2
[AD-A057370] p0628 N78-33106

FERLAZZO, G.
The possibility of installing a Microwave Landing System at the Palermo/Punta Raisi airport
p0119 A78-19042

FERNALD, W. W.
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
FERNANDES, S. T.
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
FERRELL, K. R.
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
FERRI, A.
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Possibilities and goals for the future SST
[AIAA-PAPER-75-254] p0017 N78-10006
Review of problems in application of supersonic combustion
p0017 N78-10007
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
Practical aspects of sonic boom problems
[ICAS-PAPER-70-23] p0018 N78-10011
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
Better marks on pollution for the SST
p0018 N78-10013
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
The problem of pollution for the SST
[ICAS-PAPER-74-29] p0018 N78-10015
FERTE, J. P.
Boron aluminum composite materials
[AAAF-NT-77-38] p0355 N78-22170
FERTE, J.-P.
Boron-aluminum composite materials
p0130 A78-20146
FERTIN, G.
Laser velocimeter for wind tunnel measurements
p0378 A78-37979
FESENKO, V. T.
Dynamics of a string accelerometer
p0131 A78-20256
FETZER, W. W., JR.
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
FEURZEIG, W.
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
FEW, D. D.
Tilt-proprotor perspective
p0075 A78-16694
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
FEW, J. D.
Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068
FEWELL, L. L.
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
FFOWCS WILLIAMS, J. E.
The noise from the large-scale structure of a jet
p0227 A78-27144
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
FICHTL, G. H.
A technique for simulating turbulence for aerospace vehicle flight simulation studies
[NASA-TM-78141] p0079 N78-12014
NASA's aviation safety research and technology program
p0268 N78-19719
FIEBIG, M.
Similarity considerations for nonequilibrium nozzle flows
p0583 A78-51163
FIEDLER, H.
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
FIELD, J. E., JR.
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
FIELDS, W. D.
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
FILECCIA, G. L.
Integrated flight trajectory control
p0061 A78-15563
FILIMONOV, I. M.
Calculation of the mean flow characteristics at the inlet to the air intake located under a delta wing
p0165 A78-20895
FILIN, V. A.
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
FILOSOFOV, V. K.
Operator work capacity during parachutist free-fall
p0517 A78-47978
FILTRI, G.
Noise as a source of fatigue in aeronautical structures
p0121 A78-19077
FILZ, J.
Digital flight control system - Advanced technology of flight control
p0569 A78-50266
FINPEL, H. P.
The use of pyranometers onboard aircraft
[DLR-FB-77-24] p0145 N78-14379
The use of pyranometers in aircraft
[ESA-TT-433] p0250 N78-18408
FINK, M. R.
Evaluation of airframe noise prediction methods
p0329 A78-33088
Noise component method for airframe noise
p0340 A78-35660
Minimum on-axis noise for a propeller or helicopter rotor
p0590 A78-51949
A method for calculating externally blown flap noise
[NASA-CR-2954] p0311 N78-20920
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
FINLEY, T. D.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
FINNEY, J. M.
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
Load interaction effects in fatigue crack propagation
p0555 N78-30285
FIORAVANTI, A.
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
FIORE, A. W.
M=3 turbulent boundary layer measurements at very high Reynolds numbers
[AD-A055952] p0607 N78-32072
FIORENTINO, A. J.
Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067

NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
FIORINI, V.
The conditions of stationary flight for distributed-jet helical rotors
p0120 A78-19066
FIORITO, H. J.
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
FISCH, L.
Research into effects of aircraft noise on hearing of children in exposed residential areas around an airport
p0117 A78-18779
FISCHER, B.
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
FISCHER, F.
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
FISCHER, H.
The integrated shielded propeller as a drive system for general aviation aircraft
[DGLR PAPER 77-045] p0190 A78-24434
Civil components program "Wing Section". Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
FISCHER, K. E.
High frequency dynamic engine simulation
[NASA-CR-135313] p0097 N78-13059
FISCINA, C.
An investigation into the effects of shear on the flow past bluff bodies
[AIAA PAPER 78-331] p0186 A78-24025
FISHBACH, L. H.
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
FISHBEIN, B. D.
Comparison of the characteristics of bypass turbojet engine employing a small-size gas-turbine in the outer duct with those of a turbojet engine in supersonic cruising flight
p0581 A78-50790
FISHER, B. D.
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Summary of NASA landing-gear research
p0497 N78-29056
FISHER, D. F.
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064
FISHER, F. A.
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
FISHER, H. A.
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061
FITZGERALD, J. H.
Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
FITZSIMMONS, H. D.
Technology readiness for an SST
[AIAA PAPER 78-356] p0186 A78-24031
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
FITZWILLIAMS, O.
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
FLACK, R. D., JR.
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
FLANAGAN, P. P.
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105
FLECHNER, S. G.
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds
[NASA-TN-D-8474] p0299 N78-20065
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
Experimental results of winglets on first, second, and third generation jet transports
p0496 N78-29048
FLEETER, S.
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
Aerodynamic phenomena in an oscillating transonic NCA airfoil cascade including loading effects
p0347 N78-22066
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
FLETCHER, C. A. J.
Subsonic, inviscid flow by the finite element method
[WRE-TR-1858(W)] p0147 N78-15005
FLOOD, J. D.
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
FLYNN, J.
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
FLYNN, N. S.
Requirements for VLA systems
p0260 N78-19118
FOELSCHE, T.
Radiation safety in high-altitude air traffic
p0071 A78-16184
FOERSCHING, H.
Prediction of the unsteady airloads on harmonically oscillating spheroids based on an analytical solution of the governing wave equation
p0276 A78-29338
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
FOERSCHING, H. W.
Prediction of the unsteady airloads on oscillating lifting systems and bodies for aeroelastic analyses
p0333 A78-34087
FOERSTER, S.
Development of ceramic components for an automotive gas turbine
p0578 A78-50632

FOGG, L.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
FOGGIE, P. B.
Advances in inertial navigation
p0509 A78-47481
FOLAYAN, C. O.
Impingement cooling and its application to combustor design
p0573 A78-50584
FOLLANSBEE, P. S.
Experimental clean combustor program· Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
FOLLE, M. I.
Nearly wedge-shaped antisymmetric wing in supersonic flow
p0170 A78-22080
Drag formula for elongated aircraft noses
p0278 A78-29718
Linear theory of supersonic flows past ruled bodies of three-dimensional configuration
p0586 A78-51443
FOMIN, V. M.
Investigation of the influence of the boundary layer's state on the aerodynamic characteristics at transonic speeds
p0129 A78-19732
FORD, D. G.
The development of the theory of structural fatigue
p0555 N78-30283
FORD, M. J.
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
FORD, R. L.
Fully-automated, pilot-monitored air traffic control
p0373 A78-37155
FORD, T.
Doppler MLS - The UK solution
p0280 A78-29934
British Airways Tri-Star - Present and future
p0386 A78-39393
FORD, T. E.
RB 211 - Progress and prospects
p0217 A78-25141
FORESTER, C. K.
Numerical simulation of the interaction of jet and freestream flows in engine exhaust systems
[AIAA PAPER 78-144] p0173 A78-22584
FORM, P.
Design of a collision avoidance system model with statistical interrogation
p0304 N78-20107
FORNEY, A. K.
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
FORNEY, D. M.
The economic implications of NDE: Opportunities and payoff
p0443 N78-26463
FORREST, J. B.
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
FORREST, R. D.
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
FORSCH, H. H.
Advanced design composite aircraft program
p0077 A78-16919
FORSEY, C. R.
The calculation of transonic flow over three-dimensional swept wings using the exact potential equation
p0477 A78-45232
FORSTER, E. E.
A programmable display test unit
p0417 A78-40917
FORSYTH, J. P.
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
FORSYTH, R. W.
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
FORTENBAUGH, R. L.
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
Analysis of the influence of the OGE/IGE transition on VAK-191B flying qualities in hover
p0259 N78-19109
FORZANI, L.
Helicopter flight demonstration
p0380 A78-38750
FOSHEE, J. J.
The relationship between simulation and flight test
p0062 A78-15586
A modulation/encoding scheme for use in a fading environment
p0069 A78-15718
FOSSARD, A.-J.
Strategic positioning and traffic regulation in the terminal zone
p0217 A78-25150
FOSTER, C. R.
Status report on aircraft noise certification
p0340 A78-35652
Helicopter external noise requirements: FAA perspective
p0618 N78-32817
FOSTER, D. N.
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
FOSTER, F. R.
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations
[AD-A042785] p0206 N78-17044
FOSTER, T.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
FOT, N. A.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
FOUGHNER, J. T., JR.
F-16 flutter model studies with external wing stores
p0117 A78-18801
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004
FOURNIER, P. G.
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
Distributed upper-surface blowing concept
p0390 N78-24056
FOURNIER, R. H.
Static aerodynamic characteristics of a winged single-stage-to-orbit vehicle at Mach numbers from 0.3 to 4.63
[NASA-TP-1233] p0544 N78-30053
FOX, C. H. J.
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
FOX, C. H., JR.
Calibration and test capabilities of the Langley 7- by 10- foot high speed tunnel
[NASA-TM-X-74027] p0043 N78-11121
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a

close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter model employing a strake-wing concept
[NASA-TM-74071] p0437 N78-26103
FOX, D. B.
AN/ARN-101 test and evaluation
p0065 A78-15644
FOX, D. G.
Aircraft hazard detection and control utilizing an aircraft data acquisition system
[AD-A054416] p0500 N78-29092
FOX, E. I.
Reversing the trend of cockpit complexity with smart displays
p0059 A78-15381
FOX, H.
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009
FOX, T. S.
A method for the construction of flow nozzles and wind tunnel contraction sections
p0168 A78-21635
FOX, W. R.
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
FOY, W. H.
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
FRAIDEL, H.
Alpha Jet - A great leap forward
p0470 A78-44617
FRAME, G. B.
Simulation of airport air quality by box photochemical and Gaussian models
p0216 A78-25033
FRANCIOLI, A.
Technical-analytical assistance now even in the field
p0119 A78-19053
FRANCIS, J.
Some operational experience of Concorde weight and balance
p0110 A78-17892
FRANCIS, M. S.
A technique for vorticity measurement in unsteady flow
[AIAA 78-801] p0295 A78-32356
FRANCISCUS, L. C.
Supersonic through-flow fan engines for supersonic cruise aircraft
[NASA-TM-78889] p0361 N78-23088
FRANKE, G. F.
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
FRANKEL, F.
FAA facilities maintenance cost reduction model
p0428 A78-43043
FRANKENFELD, J. W.
Alternate fuels nitrogen chemistry
[AD-A053299] p0411 N78-25240
FRANKLIN, C. G.
Improving reliability of avionics equipments through engineering testing
[AD-A042454] p0024 N78-10064
FRANKLIN, J. A.
Lift/cruise fan VTOL aircraft
p0076 A78-16695
FRECHE, J. C.
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 A78-24910
FREED, M. M.
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
FREEDMAN, J. E.
Dealing with false targets in the Air Traffic Control Radar Beacon System
p0374 A78-37486
Description of a model for evaluating operational performance of communications system
[AD-A057199] p0632 N78-33313
FREEDMAN, P.
Space optical communications with the Nd:YAG laser
p0285 A78-30886
FREEDMAN, R. N.
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
FREEMAN, C. E.
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage
[NASA-TM-74033] p0604 N78-32049
FREEMAN, D. C., JR.
Static aerodynamic characteristics of a winged single-stage-to-orbit vehicle at Mach numbers from 0.3 to 4.63
[NASA-TP-1233] p0544 N78-30053
FRENKIEL, F. N.
Thirty years of fluid dynamics
p0585 A78-51280
FRESE, L.
Choice of wing flap type taking into account the noise of the approach phase
p0119 A78-19043
FREYMANN, R.
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external stores
[DLR-FB-77-21] p0238 N78-18014
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064
FRICK, J.
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
FRICKER, W. W.
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
FRIDLAND, V. IA.
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189
FRIED, W. R.
Principles and simulation of JTIDS relative navigation
p0222 A78-26156
FRIEDEL, H.
Analysis of error sources in predicted flight performance
p0435 N78-26087
FRIEDMAN, R.
Alternative fuels
p0040 N78-11074
FRIEDRICH, H.
Simulation in the development of the training and ground-attack aircraft Alpha Jet
p0289 A78-31943
FRINK, N. T.
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
FRISCH, B.
Grumman's radio-controlled experimental air force
p0379 A78-38522
FRISINA, J. N.
Simulation testing via mini computer
p0428 A78-43057
FROES, F. H.
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
FROLOV, V. M.
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload

p0128 A78-19693
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917
Rational arrangement of the structural and load-bearing elements of the wing with allowance for certain aerodynamic requirements
p0167 A78-20984
FROHNE, J.
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
FROMMLET, H.
IDS - An advanced hingeless rotor system
p0372 A78-36950
FROST, W.
Helicopter response in gusty winds about a building
p0055 A78-14954
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Wind shear modeling for aircraft hazard definition
[NASA-CR-155223] p0034 N78-11022
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037
FROST, W. G.
Captive carriage vibration of air-to-air missiles on fighter aircraft
p0587 A78-51470
FROSTMAN, D. L.
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083
FRUH, C. A.
The Central Flow Control /CFC/ system
p0595 A78-52960
FRY, D. E.
Aircraft ride-bumpiness and the design of ride-smoothing systems
p0431 N78-26053
FRYDRYCHOWICZ, J. J.
A study of the P-3C Omega navigation system
[AD-A044474] p0084 N78-12064
FUCHS, H. V.
Noise research at DFVLR with relevance for industry
p0115 A78-18505
Acoustic interference effects and the role of Helmholtz number in aerodynamic noise
[DLR-IB-257-77/11] p0251 N78-18878
FUHS, A. E.
A rising sun in aircraft
p0379 A78-38524
LASTOP: A computer code for laser turrets optimization of small perturbation turrets in subsonic or supersonic flow
[AD-A049272] p0255 N78-19076
FUIJKSCHOT, P. H.
PHAROS, processor for harmonic analysis of the response of oscillating surfaces
[NLR-MP-77012-U] p0238 N78-18019
FUJII, K.
Second order transonic small perturbation flow
p0424 A78-42198
FUJII, S.
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
FUJII, T.
The effect of strain rate on mechanical properties of adhesives and adhesive bonded joints
p0425 A78-42569
FUJIMOTO, W. T.
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095
FUJITA, T. T.
An analysis of three weather-related aircraft accidents
[NASA-CR-155363] p0239 N78-18024
FUKANO, T.
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
FULKERSON, D. A.
F100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
FULLER, A. B.
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report
[AD-A054016] p0550 N78-30119
FULLER, D. E.
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95
[NASA-TM-78706] p0604 N78-32050
FULLER, R. G.
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
FULTON, F. L., JR.
Shuttle carrier aircraft flight tests
p0234 A78-28464
FUNG, K.-Y.
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
FUNK, A. F.
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
FUNK, J. E.
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
FURMAN, A. I.
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
FUTRAL, S. M., JR.
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
FUZIK, M. I.
Probabilistic model of an instrument landing system
p0509 A78-47407

G

GABEL, B. K.
Coatings for fretting prevention
p0178 A78-23441
GABEL, R.
Vibration in helicopters
p0331 A78-33444
GABRIELLI, G.
The weight of fuel tanks in aircraft
p0175 A78-22848
GABUTTI, B.
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
GADETSKII, V. M.
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
GAEDKE, M.
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings
[DLR-IB-152-75/25] p0044 N78-11204
GAERTNER, K.-P.
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
GAFFIN, W. O.
Engine component improvement: JT8D and JT9D performance improvements

p0447 N78-27052
GAGARIN, S. P.
Aircraft measurements of the spatial fluctuation characteristics of atmospheric radio emission at wavelengths of 0.8 and 1.35 cm
p0229 A78-27721
GAIDACHUK, V. E.
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
Determination of the constants of the diffusion theory of fatigue fracture
p0132 A78-20289
GAILLAC, J. P.
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
GAINER, T. G.
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
GALKINA, N. S.
Transmission of a concentrated force to a plate
p0129 A78-19726
GALLAGHER, J.
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators
[AD-A049277] p0257 N78-19089
GALLAGHER, J. P.
Jet fuels from synthetic crudes
p0461 A78-43415
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095
GALLAGHER, J. T.
Flight control system design for ride qualities of highly maneuverable fighter aircraft
p0431 N78-26054
GALLILY, I.
The dynamics of non spherical particles
[AD-A047144] p0256 N78-19080
GALLON, M.
Flow in a hydraulic model of an axial turbomachine
[ONERA, TP NO. 1977-157] p0075 A78-16619
GALLOP, H. A., JR.
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles
p0592 A78-52360
GALLOT, J.
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
GALLOWAY, W. J.
Acoustical standards and their application to aircraft noise
p0341 A78-35661
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
GALMICHE, P.
Protection of cooled blades of complex internal structure
p0321 N78-21141
GAMAUF, K. J.
Objective measurement of voice channel intelligibility
[AD-A048611] p0248 N78-18264
GAMBLE, A. C.
Transport Canada airfield pavement load evaluation
p0526 A78-49678
GAMBUCCI, B. J.
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
GAMON, M. A.
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KRASH theory
[AD-A055898] p0560 N78-31088
GANDEE, G. W.
Air Force research and development activities related to aircraft fire protection
[AIAA PAPER 78-269] p0163 A78-20782
GANGSAAS, D.
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
GANIEV, F. I.
Method for calculating the longitudinal, lateral, and cross aerodynamic derivatives of a flight vehicle at subsonic speeds
p0342 A78-35905
GANJI, A. R.
Laboratory studies of lean combustion
p0040 N78-11079
GANSHIN, V. N.
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523
GANZ, A. A.
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
GANZER, U.
Problems of supersonic transport
[DGLR PAPER 77-007] p0188 A78-24404
GARABEDIAN, P.
Supercritical wing sections III
p0341 A78-35728
GARDEZ, M. J.
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
GARDNER, P. B.
Ceramic composite protection for turbine disc bursts
p0026 N78-10083
GARMONG, G.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
GARNER, H. C.
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118
GARNER, J. D.
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
GARNETT, T. S., JR.
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115
Limitations of the UTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
GARREN, J. F., JR.
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] p0210 N78-17070
GARRETT, D. A.
The macroscopic detection of corrosion in aluminum aircraft structures with thermal neutron beams and film imaging methods
[PB-277074/1] p0364 N78-23214
GARRISON, J. R.
The Bell Model 222
[SAE PAPER 770951] p0179 A78-23802
The Bell Model 222
p0263 N78-19138
GARTNER, R.
Hydraulic constant recoil program
[AD-A049313] p0267 N78-19517
GARTNER, W. B.
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078

GASPARINI, O.
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
GASTON, D. W.
RPV video digital multiplexing system
p0063 A78-15613
GAT, N.
Some effects of temperature on the erosion of metals
p0588 A78-51594
GATLIN, D. H.
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
GAUKROGER, D. R.
Measurement of vibratory displacements of a rotating blade
p0524 A78-49397
GAUL, J.
Heavy lift helicopter flight control system. Volume 3: Automatic flight control system development and feasibility demonstration
[AD-A050059] p0324 N78-21164
GAUNTNER, D. J.
Global atmospheric sampling program
p0040 N78-11076
GAVRILENKO, G. D.
Finite difference equations for the computation of the stress-strain state of rib-reinforced cylindrical shells
p0132 A78-20287
GAVRISEV, V. S.
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
GAYNOR, T. L.
Lightweight, low compression aircraft diesel engine
[NASA-CR-135300] p0325 N78-21471
GAZANA, L. S.
Features of unsteady flows over airfoils
p0346 N78-22054
GEBHARDT, G. T.
Digital avionics overview airframe manufacturers' update
[AIAA 77-1470] p0005 A78-12229
GEDDES, J. P.
World commercial air transport market to 1991
p0003 A78-11799
Giants battle in US small turbine market
p0274 A78-29174
Boeing launches the 767
p0591 A78-52244
The L-1011-500 long-range TriStar
p0591 A78-52245
GEE, S. W.
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
GEIER, B.
Problems of the theory of strength related to aircraft construction and civil engineering; Structural Mechanics Meeting, Ottobrunn, West Germany, June 1, 2, 1977, Lectures and Discussion Contributions
p0382 A78-38802
GEISELHART, R.
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
GEISSLER, W.
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
The interference problem of the oscillating fuselage near ground
p0204 N78-17008
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029
Calculation of unsteady airloads on oscillating three-dimensional wings and bodies
p0346 N78-22038
GEIST, W. F.
An adaptive interference cancellation system for elimination of co-located interference signals
p0227 A78-27041
GEJJI, R. R.
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
GENET, R. M.
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
GENEVER-WATLING, D. C.
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
GENTER, B. V.
Doctrine versus capabilities: A project manager's dilemma with the CH-47 helicopter
[AD-A052376] p0413 N78-25970
GEOKEZAS, M.
Autothreshold autoscreener/FLIR system
p0538 A78-49984
GEORGE-FALVY, D.
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
GEORGE, C. W.
Current trends in the aerial application of fire retardants
p0425 A78-42512
GEORGE, L. L.
Replacement process analysis: An interim report on replacement models
[AD-A052411] p0399 N78-24150
GEORGE, R. E.
In-flight measurement of aircraft acoustic signals
p0105 A78-17364
GERA, J.
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
GERARDI, A. G.
Collection of commercial aircraft characteristics for study of runway roughness
[AD-A042623/9] p0030 N78-10118
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
GERASIMENKO, V. P.
Determination of the type of rotating stall in an axial compressor stage
p0131 A78-20255
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
GERDES, R. M.
A piloted simulation of V/STOL landings aboard a non-aviation ship
p0259 N78-19106
GERHARZ, J. J.
Fatigue strength of joints with special fasteners, part 2
[RAE-LIB-TRANS-1920] p0145 N78-14408
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
GERHARZ, R.
The flapwing, a unique fluid machine element
p0418 A78-41157
GERLIGA, V. A.
Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures

p0580 A78-50780
GERMANCHUK, F. K.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
GERSCH, J. A.
The ARTS III Umbrella - Concepts and applications
p0594 A78-52958
GERSHBEIN, E. A.
Contribution to the theory of three-dimensional hypersonic viscous gas flow past blunted bodies in the presence of injection
p0580 A78-50757
GERSHON, I. J.
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
GERSTEN, K.
Second-order boundary-layer flow with hard suction
p0076 A78-16812
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
GERSTENMAIER, W. H.
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[AIAA PAPER 78-961] p0474 A78-45096
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125
GERTSEN, W. M.
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
GESSOW, A.
A survey of computational aerodynamics in the United States
[NASA-SP-394] p0033 N78-11007
GEVAERT, G.
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
GEYMONAT, G.
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
GEYSER, L. C.
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024
DYGABCD: A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110
GHARIB, M.
Prospects for supersonic jet noise suppression
p0329 A78-33089
GHOLSON, N. H.
A performance analysis of a radar tracking filter
p0107 A78-17564
GHOSH, E. P.
An investigation on the cracking of aircraft pipe line sleeves
p0123 A78-19415
GHOSHROY, S.
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
GIARDINA, C. R.
New techniques for low cost strapdown inertial systems
p0315 N78-21073
GIBBAR, J. M.
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
GIBBS, B. P.
Results of the NASA/MARAD L-band satellite navigation experiment
p0375 A78-37525
GIBSON, F. L.
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
GIBSON, J. S.
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
Characteristics of USB noise
p0391 N78-24061
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
GIERHART, G. D.
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314
GIESE, P.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
GIESLER, W.
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
GIESSLER, F. J.
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089
GILBERT, E. G.
System optimization by periodic control
[AD-A049522] p0323 N78-21162
GILBERT, G. A.
Preventing zero-growth air transportation
p0107 A78-17569
The helicopter operators' viewpoint
p0594 A78-52955
GILBERT, W. P.
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
GILDERSLEVE, E. H.
Flight testing of radars
p0054 A78-14933
GILES, P. N.
Advanced flight decks for the 80s
p0273 A78-28835
GILL, A. T.
Optical simulator with a holographic component
[AIAA 78-1581] p0579 A78-50671
GILLESPIE, K. M. S.
A critique of aircraft airframe cost models
[AD-A047181] p0198 N78-16048
GILLETTE, W. B.
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
GILLMAN, H. D.
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273
GILLMAN, R. E.
Automatic airspace
p0273 A78-28834
GILMOUR, A. S., JR.
Power conditioning systems for high-power, airborne, pulsed applications
p0177 A78-23412
GILREATH, M. C.
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
GILSINN, J. F.
Problems in world-wide standardization of the units of height measurement
[AD-A051150] p0402 N78-24385
Problems in world-wide standardization of the units of altitude measurement
[PB-277982/5] p0454 N78-27119
GILYARD, G. B.
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
GINEVSKII, A. S.
Turbulent boundary layer on a moving surface
p0163 A78-20850
GIRIDHARADAS, B.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
GIURGIUTIU, V.
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430

GIUSTI, A.
Spectrometric assessments of wear-generated materials in aviation lubricants
p0119 A78-19054
GLANICHE, P.
Protection of cooled blades of complex internal structure
[NASA-TM-75217] p0087 N78-12086
GLASER, F. C.
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
GLASGOW, J. C.
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552
GLASIER, J. M.
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
GLAZNEV, V. N.
Semiempirical theory of the generation of discrete tones by a supersonic underexpanded jet flowing over an obstacle
p0168 A78-21133
GLAZUNOV, A. A.
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
Investigation of nonequilibrium two-phase flows in axisymmetric Laval nozzles
p0518 A78-48244
GLEASON, C. C.
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
GLEBOVA, E. V.
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
GLEIZER, A. I.
Search-method optimization of the balancing of flexible rotors of gas turbine engines
p0581 A78-50795
GLENNIE, D. G.
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report
[AD-A053362] p0409 N78-25098
GLIEBE, P. R.
Coupled inviscid/boundary-layer flow field predictions for transonic turbomachinery cascades
p0012 A78-12311
GLOECKNER, B.
Further improvement of the efficiency of computational procedures in flight operations
p0051 A78-13499
The effect of fuel consumption on cost developments
p0469 A78-44197
GLOSS, B. B.
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration
[NASA-TM-78686] p0487 N78-28052
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
GLOSSBRENNER, E. W.
Turbine engine slip ring technology - A survey
[SAE PAPER 770976] p0179 A78-23820
GLOTZ, G.
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
GNELIN, B.
DFVLR studies on rotary-wing flight mechanics
p0114 A78-18502
DFVLR rotorcraft research
p0263 N78-19146
GNESIN, V. I.
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
GOAD, R. C.
Development of thermoplastic composite aircraft structural elements
[AD-A048468] p0258 N78-19097
GOBETZ, F. W.
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
GODFREY, J. T.
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073
GOEBEL, T. P.
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
GOEHLER, D.
Cast Aluminum Structures Technology (CAST)
[AD-A043469] p0045 N78-11236
GOEHLER, D. D.
Structural castings for aircraft - A progress report from Boeing
p0232 A78-28370
GOELLER, W.
Tethered RPV-rotorcraft
p0263 N78-19141
GOETZ, G. F.
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
GOETZ, T. J.
A study of opportunistic replacement tactics for modular jet engine management
[AD-A044184] p0079 N78-12001
GOGOLIN, V. P.
An evaluation of weight optimization of aircraft radioelectronic equipment
p0174 A78-22646
Evaluating avionics weight efficiency
p0518 A78-48228
GOGOLL, T. H.
Turbine engine slip ring technology - A survey
[SAE PAPER 770976] p0179 A78-23820
GOLBERG, M.
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
GOLDBERG, B.
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
GOLDIE, H.
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
GOLDMAN, L. J.
Effect of endwall cooling on secondary flows in turbine stator vanes
p0041 N78-11098
GOLDRING, R. N.
Feasibility study of negative lift circumferential type seal for helicopter transmissions
[NASA-CR-135302] p0212 N78-17390
GOLDSCHMIED, F. R.
Aerodynamic hull design for HASPA LTA optimization
p0517 A78-48100
GOLDSMITH, H. A.
Supersonic transports
p0286 A78-31152
GOLDSTEIN, F.
Singular perturbation analysis of optimal flight profiles for transport aircraft
p0183 A78-23901
GOLDSTEIN, R. J.
Film cooling of a gas turbine blade
p0573 A78-50580
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling

performance
p0573 A78-50582
GOLOVACHEV, IU. P.
Calculation of viscous radiant gas flows
p0599 A78-53556
GOLOVANEV, IU. M.
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
GOLUBEVA, I. A.
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
GOLUBINSKII, A. I.
Three-dimensional hypersonic gas flow past a thin wing
p0163 A78-20795
Three-dimensional flow of hypersonic gas past a thin airfoil
p0281 A78-30002
GOLUBKIN, V. N.
Three-dimensional hypersonic gas flow past a thin wing
p0163 A78-20795
Hypersonic gas flow past a flat delta wing
p0166 A78-20966
Three-dimensional flow of hypersonic gas past a thin airfoil
p0281 A78-30002
Influence of slip on the aerodynamic behavior of a wing at hypersonic speeds
p0342 A78-35916
GOLUBOVSKII, E. R.
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
GONG, L.
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0
p0606 N78-32065
GONOR, A. L.
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
Study of supersonic separated flow past conical wings and inside a right angle
p0170 A78-22079
GONZALEZ CRISTOBAL, P.
An integrated analysis of the fundamental problems of air transport
p0525 A78-49447
GOODALL, R. E.
Advanced technology helicopter landing gear
[AD-A048891] p0261 N78-19124
GOODE, M. W.
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
GOODERUM, P. B.
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
GOODMAN, R. J.
Digital simulation of aircraft flight path dynamics using quaternions
[AIAA PAPER 78-311] p0185 A78-24012
GOODRICH, W. C.
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
GOODSON, J. E.
Human factors engineering for head-up displays: A review of military specifications and recommendations for research
[AD-A056944] p0627 N78-33099
GOODWIN, J. R.
Airport planning and economics - Some changing perspectives
[SAE PAPER 770581] p0060 A78-15386
GOODWIN, J. W.
Intermittent positive control. Phase 1: Operational test and evaluation
[AD-A047249] p0195 N78-16030
GOODWIN, R.
COMPUTROL - A new technique in image generation
[AIAA 78-1579] p0579 A78-50660
GOODYER, M. J.
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
The 0.1m subsonic cryogenic tunnel at the University of Southampton
[NASA-CR-145305] p0247 N78-18086
GORAJ, Z.
Lateral stability of a light aircraft during landing
p0167 A78-21020
GORDON, J. T., JR.
A perturbation method for predicting amplitudes of nonlinear wheel shimmy
p0325 N78-21464
GORDON, R. E.
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
GORDON, R. W.
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
GORHAM, J. A.
Study to determine operational and performance criteria for STOL aircraft operating in low visibility conditions
[NASA-CR-152164] p0490 N78-28083
GORLIN, S. M.
Studies in experimental aerodynamics
[NASA-TT-F-17158] p0450 N78-27086
GORMONT, R. F.
The US Army OTTAS and AAH programs
p0262 N78-19131
GORODETSKII, V. N.
Estimating the service life of rolling contact bearings when synthetic oils are used
p0334 A78-34324
GOROVOI, B. I.
The An-26 aircraft: Construction and use
p0283 A78-30273
GORSHKOV, M. I.
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455
GORSKII, V. B.
Transonic swirling gas flow through a nozzle
p0170 A78-22355
GORTYSHOV, IU. F.
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
GOSTINTSEV, IU. A.
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
GOTKIN, L.
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
GOTLEIB, P.
Preliminary design of a flight control system for a V/STOL airplane with geared variable pitch fans
p0259 N78-19113
GOTOH, M.
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
GOVINDARAJ, K. S.
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
GOWER, J. F. R.
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892

GRABBERR, E.
The legal basis for security measures in air traffic
p0589 A78-51823
GRABEL, L.
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235
GRABITZ, G.
Model calculations of the generation of self-excited oscillations in a supersonic duct with stepwise widening of cross section
p0584 A78-51165
GRABOWIECKI, A.
Filtering techniques in avionic transmitters
p0384 A78-39084
GRADY, G. E.
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
GRAEWE, E.
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
GRAF, W. O.
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[JTIAS-215] p0246 N78-18077
GRAFTON, S. B.
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
GRAHAM, J. M. R.
Small perturbation expansions in unsteady aerofoil theory
p0074 A78-16401
GRAHAM, L.
Fire detection devices
p0175 A78-22900
GRANDE, D. L.
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2825] p0306 N78-20116
GRANGIER, M.
The quest for new technologies in the helicopter field
p0339 A78-35325
GRANHOLM, E.
APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
GRANTHAM, W. D.
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
GRATZER, L. B.
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
GRAVELLE, P.
Product support for French equipment used by civil aviation companies
p0278 A78-29657
GRAVES, G. L.
Laboratory testing of lightning and EMP susceptibility of avionic systems
p0531 A78-49861
GRAY, D. E.
Energy efficient engine: Preliminary design and integration studies
p0447 N78-27053
GRAY, D. H.
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
GRAY, H. R.
The promise of eutectics for aircraft turbines
p0215 A78-24882
The promise of eutectics for aircraft turbines
[NASA-TM-73714] p0028 N78-10098
GRAY, R. B.
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
Computation of two-dimensional potential flow using elementary vortex distributions
p0590 A78-51948
GRAY, E. R.
The impact of Bermuda II on future bilateral agreements
p0224 A78-26472
GRAZIANI, D.
Precision DME for new landing system - Fast or slow pulse
p0225 A78-26549
GRAZIANO, R. S.
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
GREATLINE, S. E.
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
GREBENIKOV, A. G.
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
GREEN, G. C.
Helicopter noise research at the Langley V/STOL tunnel
p0619 N78-32826
GREENE, C. S.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
GREENE, J. K.
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091
GREENE, L. B.
User delay cost model for a terminal control area
p0427 A78-43039
GREENE, R. A.
The airborne detection of low-level wind shear
[AIAA PAPER 78-1495] p0515 A78-47936
GREENE, W.
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
GREENWAY, M. K.
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684
GREENWELL, R. A.
A-7 ALOFT demonstration and economic analysis
p0054 A78-14939
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
GREENWOOD, R. C.
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655
GREENWOOD, S. W.
Turbojet engine performance at high turbine entry temperatures with transpiration cooled turbine blading
p0351 N78-22095
GREER, P. E.
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118
GREGOREK, G. M.
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
Analytical study of a free-wing/free-trimmer concept
[NASA-CR-2946] p0236 N78-18000
GREGORIOU, G.
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed
[BMVG-FBWT-77-15] p0238 N78-18013
GREGORY, F. D.
Ground-based and in-flight simulator studies of low-speed handling characteristics of two

supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
GREGORY, T. J.
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Remotely piloted aircraft in the civil environment
p0283 A78-30506
Future requirements and roles of computers in aerodynamics
p0269 N78-19786
GREINER, H. P.
Design considerations in mechanical face seals for improved performance. 1: Basic configurations
[NASA-TM-73735] p0101 N78-13439
GRELLMANN, H. W.
YF-17 full scale minimum drag prediction
p0436 N78-26091
GREMS, B. C.
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
GREMS, B. C., III
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
GRENON, R.
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
GREPPER, P. O.
Direct identification of dynamical systems with application to air-vehicles
p0073 A78-16331
GRETSOV, V. K.
Experimental investigation of the characteristics of unsteady-state breakaway zones arising in a supersonic flow at a needle with a screen
p0334 A78-34436
GRIAZNOV, B. A.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
GRIB, A. A.
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
Unsteady hypersonic gas flow past a thin wing of finite span
p0529 A78-49792
GRIEB, H.
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109
GRIFFIN, L. D.
C-141A service experience - Materials and processes
p0219 A78-25207
GRIFFIN, W. R.
Fundamentals of noncuring sealants for aircraft fuel tanks
[AD-A054627] p0553 N78-30247
GRIFFITH, D. A.
Initial development of a tactical system for dispersing supercooled stratus
[AD-A056570] p0635 N78-33677
GRIFFITH, S. L.
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
GRIFFITH, W. C.
Thirty years of fluid dynamics
p0585 A78-51280
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
GRIFFITHS, R. E.
An identification and characterization of cost models/techniques used by Air Force Logistics Command to estimate jet engine operation and support costs
[AD-A044083] p0088 N78-12095
GRIGORIAN, G.
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
GRIGORIAN, S. S.
Some problems of continuum mechanics
p0580 A78-50751
GRIMAK, L. P.
Operator work capacity during parachutist free-fall
p0517 A78-47978
GRIMM, K. R.
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897
GRIN, V. T.
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
Construction of a mathematical model of a jet engine for analyzing transient flows
p0167 A78-20971
GRISAFFE, S. J.
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
GRISHIN, I. A.
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
GRISHIN, V. I.
Transmission of a concentrated force to a plate
p0129 A78-19726
GRISHKO, V. G.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
GRISMORE, F. L.
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
GRISSMER, D. W.
Study of the turbine engine industry
[AD-A055895] p0612 N78-32103
GRISWOLD, D. E.
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
GRITSENKO, N. A.
Calculation of the aerodynamic characteristics of a wing moving with subsonic velocity under a slight effect of a shock wave
p0334 A78-34442
GROBMAN, J.
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
GROBMAN, J. S.
Alternative fuels
p0040 N78-11074
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Characteristics and combustion of future hydrocarbon fuels
[NASA-TM-78865] p0401 N78-24370
Impact of broad-specification fuels on future jet aircraft
p0448 N78-27059
GROENEWEG, J. F.
State-of-the-art of turbofan engine noise control
p0340 A78-35658
GROESBECK, D.
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
GROMOV, V. G.
Viscous carbon dioxide flow past a blunted cone
p0586 A78-51444
GROSE, G. G.
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051
GROSS, J. F.
Second-order boundary-layer flow with hard suction
p0076 A78-16812
GROSS, L. W.
The prediction of two-dimensional airfoil stall progression

[AIAA PAPER 78-155] p0160 A78-20709
GROSSMAN, B.
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
GROSSMAN, D. G.
Aluminous keatite - A durable ceramic material for rotary regenerator cores
p0574 A78-50588
GROSSMAN, R. L.
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
GROSSMITH, S. W.
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
GROSVELD, P.
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
GROTE, R. S.
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance study. User's manual
[AD-A045625] p0091 N78-13001
GRUENEWALD, B. H.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
GRUENING, J.
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
GRUENLING, H. W.
High temperature corrosion-resistant protective coatings in stationary gas turbines
[NASA-TM-75181] p0086 N78-12080
GRUNWALD, A. J.
Display augmentation in manual control of remotely piloted vehicles
p0231 A78-28148
GRUZDEV, A. A.
Form of free vortices of a wing of finite span
p0335 A78-34444
GRZEDZINSKI, J.
A flutter analysis of a system of two airfoils with aerodynamic interference
p0338 A78-34968
Aerodynamic interference in a system of two harmonically oscillating airfoils and its influence on flutter
p0019 N78-10016
GUCCINI, E.
A synthesis of the effects of noise on structures
p0121 A78-19078
GUEDEL, A.
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
GUEST, T. C. B.
SST flight planning and navigation - The first year's experience
p0372 A78-37154
GUIN, J. R.
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
GULIAEV, V. V.
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
GUMAS, G.
Slotted test section dynamics of the NTF
[NASA-CR-155266] p0089 N78-12106
GUNCHENKO, E. I.
Steady-state bulk temperature field in cooled turbine blades
p0187 A78-24156
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
GUNDERSON, C. O.
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049
GUNNARSON, D. W.
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
GUNSTON, W.
Big fans for the airlines
p0170 A78-22269
GUNSTONE, G. L.
Engine non-containment: The UK CAA view
p0025 N78-10070
GUPTA, A. K.
Effect of blockage ratio on the turbulent near wake of a bluff body
p0224 A78-26489
GUPTA, B. P.
Helicopter external noise prediction and correlation with flight test
p0620 N78-32829
GUPTA, M. C.
A case for a new model for turbulent flame propagation
p0229 A78-27840
GUPTA, N. K.
New frequency domain methods for system identification
p0182 A78-23883
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145
GUPTA, P. C.
Engine options for supersonic cruise aircraft
[AIAA PAPER 78-1054] p0466 A78-43576
GUR, I.
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
GURBAN, V. IU.
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
GUREEV, A. A.
Effect of jet fuel autooxidation products on thermooxidation stability
p0523 A78-49025
GUSEV, V. N.
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
Characteristics of the jet acceleration of a flow to hypersonic speeds
p0166 A78-20953
GUSEVA, A. V.
Increasing the resources of jet fuels
p0003 A78-11699
GUSTINCIC, J. J.
An aircraft radiometer front end, addendum
[NASA-CR-157777] p0633 N78-33405
GUTENEV, B. S.
Estimating the service life of rolling contact bearings when synthetic oils are used
p0334 A78-34324
GUTMAN, G. M.
Formation of residual stresses in the thermal strengthening of gas-turbine engine components
p0426 A78-42740

GUZANOV, B. N.
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
GVOZDEVA, L. G.
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle
p0379 A78-38641

H

HAAS, E.
International trends in airport construction
p0328 A78-32814
HAAS, J. E.
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14998
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
HABERCOM, G. E., JR.
Parachutes and decelerators, volume 2. A bibliography with abstracts
[NTIS/PS-78/0320] p0406 N78-25067
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NTIS/PS-78/0239] p0410 N78-25099
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091
Flow visualization, volume 1. A bibliography with abstracts
[NTIS/PS-78/0425/5] p0458 N78-27379
Flow visualization, volume 2. A bibliography with abstracts
[NTIS/PS-78/0426/3] p0459 N78-27380
Lighter than air vehicles. Citations from the engineering index data base
[NTIS/PS-78/0410/7] p0607 N78-32073
Air traffic congestion and capacity. A bibliography with abstracts
[NTIS/PS-78/0598/9] p0609 N78-32085
Bird strikes and aviation safety. A bibliography with abstracts
[NTIS/PS-78/0694/6] p0624 N78-33066
Closed loop control systems. Part 1: Aircraft. A bibliography with abstracts
[NTIS/PS-78/0809/0] p0630 N78-33122
Closed loop control systems. Part 2: Miscellaneous applications. A bibliography with abstracts
[NTIS/PS-78/0810/8] p0632 N78-33278
Airport noise. A bibliography with abstracts
[NTIS/PS-78/0807/4] p0634 N78-33639
HABERLAND, C.
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
HABERLAND, W.
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
HABRAKEN, L.
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
HACKER, T.
Constant-control rolling maneuver
p0507 A78-46961
HACKETT, J. E.
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
HADDAD, D. E.
P100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
HADDEN, F. D.
YC-14B prototype testing
p0233 A78-28459
HADDEN, W. J.
Aircraft noise propagation
p0445 N78-26879
HADDOCK, J. N.
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
HAEFNER, L. E.
Benefit-cost evaluation of an intra-regional air service in the Bay area
[NASA-CR-152084] p0256 N78-19082
HAFER, X.
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
Aircraft flying performance: Principles, flight attitude, flight phases
p0480 A78-45425
HAFTKA, R. T.
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
HAFTMANN, B.
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
HAGAR, H., JR.
Differential altimetry for satellite orbit determination
p0289 A78-31915
HAGE, R. E.
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034
HAGEMAIER, D.
Nondestructive testing of adhesive bonded structure
p0480 A78-45937
HAGEMAIER, D. J.
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
HAGENDORF, H. C.
Applications of the continuum theory of subcritical flaw growth under uniaxial tensile fatigue stresses to service life cycle analysis
p0425 A78-42555
HAGER, W. W.
Minimum drag surfaces
p0342 A78-35787
HAH, C.
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
HAHN, P.
The on-board calculation of optimal climbing paths
p0434 N78-26078
HAIDL, G.
New methods for flight vibration studies
[DGLR PAPER 77-050] p0191 A78-24439
HAIDT, J.
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A053591] p0562 N78-31102
HAINES, A. L.
Concerning the logical comparison of ATC separation standard assessment models
p0370 A78-36455
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
Impact of FAA E and D elements: Eight airport summary
[AD-A054245] p0489 N78-28077
Parameters of future ATC systems relating to airport capacity/delay
[AD-A055482] p0566 N78-31130
Parameters of future ATC systems relating to airport capacity/delay
[AD-A057059] p0624 N78-33068
HAINES, R. F.
Project plan for joint FAA/NASA head-up display concept evaluation
[NASA-TM-78512] p0495 N78-28979
HAINES, R. L.
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter

[AD-A039735] p0311 N78-20636
HAINS, F.
Feasibility analysis for a microwave deicer for helicopter rotor blades
[AD-A042581] p0022 N78-10052
HAISLIP, D. T.
The Omega radionavigation system comes to the Pacific Ocean area
p0525 A78-49660
HAJJAR, P.
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
HAKKINEN, R. J.
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
HALE, A. L.
Structural dynamics, stability, and control of helicopters
[NASA-CR-158909] p0552 N78-30139
HALE, F. J.
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
HALL, C. A.
A simulation model for an enplaning-passenger-vehicle curbside at high-volume airports
p0239 N78-18020
HALL, D. C.
Expendable design concept
[AIAA PAPER 78-964] p0463 A78-43523
HALL, D. W.
Analytical study of a free-wing/free-trimmer concept
[NASA-CR-2946] p0236 N78-18000
HALL, G. W.
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
HALL, M.
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
HALL, M. G., III
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
HALL, R. M.
Condensation and its growth down the test-section of the Langley 0.3-m transonic cryogenic tunnel
[AIAA 78-811] p0296 A78-32365
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
HALL, S.-L. V.
Distortion of the sonic-boom pressure signature by high-speed jets
p0479 A78-45393
HALL, T.
New airport in Gothenburg - How the noise problems have been handled
p0015 A78-12822
HALL, W. E., JR.
A turbofan engine controller utilizing multivariate feedback
p0072 A78-16326
System identification principles applied to multivariable control synthesis of the F100 turbofan engine
p0183 A78-23889
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145
HALLER, M. N.
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
HALLIWELL, D. G.
The characteristics, prediction and test analysis of supersonic flutter in turbofan engines
p0058 A78-15176
HALLOCK, J. N.
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
HALSEY, N. D.
A three-dimensional potential-flow program with a geometry package for input data generation
[NASA-CR-145311] p0312 N78-21047
HAN, M. D.
Aerodynamic interference effects on tilting proprotor aircraft
[NASA-CR-152053] p0092 N78-13007
HANAGUCHI, Y.
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
HANAMOTO, M.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
HANED, A.
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
HANEL, P.
DFVLR studies on rotary-wing flight mechanics
p0114 A78-18502
Flight mechanics today and tomorrow - Balance and perspectives
p0337 A78-34942
DFVLR rotorcraft research
p0263 N78-19146
HANER, H. A.
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138
HANILTON, C. W.
General aviation dynamics
p0428 A78-43041
HANILTON, H. W.
Feasibility study for simulation of an airport tower control environment
[AD-A051174] p0400 N78-24154
HANILTON, J. M.
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
HANN, N. D.
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
HANNER, J.
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
HANNING, R. W.
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
HANNOCK, M. S.
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion

analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131

HAMMOND, J. L.
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs
[AD-A046824] p0153 N78-15287

HAMPTON, T. L.
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497

HAN, L. S.
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130

HANABUSA, H.
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610

HANAMURA, Y.
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618

HANCOCK, G. J.
The unsteady motion of a two-dimensional aerofoil in incompressible inviscid flow
p0468 A78-43916
Two-dimensional aerofoils and control surfaces in simple harmonic motion in incompressible inviscid flow
[APC-CP-1392] p0545 N78-30068

HANCOCK, J. P.
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057

HANCOCK, R. N.
Life cycle testing for avionics development
p0060 A78-15557

HANEY, H. P.
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067

HANGARTNER, R.
Modifications to FALSTAFF that were required for operation on a 16 K PDP-8e minicomputer
[LTR-ST-899] p0202 N78-16392

HANKE, D.
The HFB 320 airborne simulator of DFVLR as test instrument for determining flight characteristics
[DGLR PAPER 77-082] p0289 A78-31944

HANKEY, W. L.
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541

HANKEY, W. L., JR.
Critical issues in viscous flow computations
p0270 N78-19792

HANKING, J. R.
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118

HANKINS, R. J.
Improved operational maintenance forcasting techniques
p0052 A78-13848

HANNAN, B.
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075

HANSEN-ADDY, J.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635

HANSEN, E. C.
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038

HANSEN, H.
The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008

HANSEN, J.
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342

HANSEN, J. S.
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785

HANSON, D. B.
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833

HANSON, L. R.
A discrete-event digital simulation model of the F-16 fire control computer operational flight program using simscript 2.5
[AD-A048164] p0207 N78-17047

HANSSON, J.
Experience in using high-modulus carbon fibre
p0077 A78-16896

HARA, K.
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613

HARCH, W. H.
The mean velocity field of unsteady subsonic air jets
p0374 A78-37417

HARDER, R. D.
A-7 ALCPT demonstration and economic analysis
p0054 A78-14939

HARDIN, L. W.
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050

HARDING, D. G.
Civil and military design requirements and their influence on the product
p0264 N78-19151

HARDRATH, H. F.
Recent developments in analysis of crack propagation and fracture of practical materials
[NASA-TM-78766] p0556 N78-30606

HARDY, G. H.
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927

HARDY, R.
Fatigue research on bonded carbon fibre composite/metal joints
p0002 A78-11400

HARDY, S. R.
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Nonlinear rolling motion analysis of a Canard-controlled missile configuration at angles of attack from 0 to 30 degrees in incompressible flow
[AD-A056695] p0631 N78-33132

HARE, E. W.
COMED - The cockpit display of the future
p0508 A78-47268

HARIHARAN, S.
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481

HARKONEN, D. L.
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076

HARMAN, H. W.
Airborne television transmission
p0477 A78-45218
HARMAN, W. H.
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
HARNISCH, R.
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
HARPER, R. B.
A computer-based system for processing dynamic data
p0372 A78-37108
HARRIES, J. E.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
HARRINGTON, E. V., JR.
A new concept in integrated reference systems
[AIAA 77-1497] p0006 A78-12245
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
HARRINGTON, J. B.
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces
[AD-A045277] p0096 N78-13049
HARRINGTON, W. W.
Estimation of the aerodynamic stability and control parameters for the F-106A aircraft from flight data - Maneuver design and flight data analysis
[AIAA 78-1326] p0482 A78-46527
HARRIS, A. S.
Noise abatement at general aviation airports - A regulator's dilemma
p0015 A78-12821
HARRIS, C. D.
Tabulated pressure measurements of a NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2634] p0393 N78-24077
Wind-tunnel measurements of aerodynamic load distribution on an NASA supercritical-wing research airplane configuration
[NASA-TM-X-2469] p0393 N78-24079
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
Wind-tunnel investigation of effects of trailing-edge geometry on a NASA supercritical airfoil section
[NASA-TM-X-2336] p0450 N78-27079
HARRIS, C. M.
Aims and progress of a battle damage repair capability in the Royal air force
p0491 N78-28091
HARRIS, G. L.
A subsonic ramjet engine for expendable drones
[AIAA PAPER 78-962] p0463 A78-43522
HARRIS, J. E.
Viscous flow simulation requirements
p0270 N78-19793
HARRIS, L. G.
Perspective radar display system: TV-like presentation on CRT provides higher lateral position and lateral motion sensitivity than a PPI
[AD-A052342] p0402 N78-24418
HARRIS, R. F.
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
HARRIS, R. L., SR.
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
HARRIS, W. L.
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
HARRISON, I. R.
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183
HARSHA, P. T.
Application of modular modeling to ramjet performance prediction
[AIAA PAPER 78-944] p0462 A78-43512
HART, C. E.
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Real time digital propulsion system simulation for manned flight simulators
[NASA-TM-78958] p0456 N78-27137
HARTILL, W. R.
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
HARTLEY, H. F.
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073
HARTMAN, W. F.
Analysis of the engine fragment threat and the crush environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078
HARTMAN, W. J.
Objective measurement of voice channel intelligibility
[AD-A048611] p0248 N78-18264
HARTMANN, G. L.
Adaptive control laws for F-8 flight test
p0013 A78-12358
HARTMANN, W.
Heavily loaded carbon-fiber-reinforced-plastic primary structure with the Tornado taileron as an example
p0383 A78-38810
HARVEY, G. G.
Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
HARVEY, R. A.
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309
HARVEY, S. T.
Advanced composites wing study program. Volume 1: Executive summary
[NASA-CR-145382-1] p0613 N78-32185
Advanced composites wing study program, volume 2
[NASA-CR-145382-2] p0613 N78-32186
HARVILL, W. E.
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
HASHIMOTO, H.
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
HASHIMOTO, T.
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611
HASPERT, K.
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
HASS, D.
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
HASS, J. E.
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
HASSAL, C. J. W.
Measurement of vibratory displacements of a rotating blade
p0524 A78-49397

HASSELL, J. L., JR.
Results of static tests of a 1/4 scale model of the Boeing YC-14 powered-lift system
p0389 N78-24049
Aerodynamic characteristics in ground proximity
p0390 N78-24055
HASTBACKA, A.
Sanders AN/FYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
HASTINGS, E. C., JR.
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
Vortex attenuation flight experiments
p0081 N78-12028
Effects of landing approach methods and separation intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
A preliminary study of the benefits of flying by ground speed during final approach
[NASA-TM-78777] p0608 N78-32076
HASTINGS, W. J.
Propulsion/flight control integration technology (PROFIT) design analysis status
[NASA-CR-144875] p0501 N78-29101
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102
HATCH, H. G., JR.
An approach to the determination of aircraft handling qualities using pilot transfer functions
p0356 N78-23018
HATFIELD, J. J.
Coming cockpit avionics
p0231 A78-28220
HAUPT, U.
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
Taking a new perspective on design
p0335 A78-34643
HAUSSLING, H. J.
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968
HAVILAND, J. K.
Unsteady loads due to propulsive lift configurations. Part A: Investigation of scaling laws
[NASA-CR-156120] p0300 N78-20067
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
Unsteady loads due to propulsive lift configurations. Part D: The development of an experimental facility for the investigation of scaling effects on propulsive lift configurations
[NASA-CR-156123] p0300 N78-20070
Investigations of scaling laws for jet impingement
p0393 N78-24074
HAWKES, T. A.
Aircraft R-Nav system connected on optical bus
p0054 A78-14941
HAWKINGS, D. L.
Theoretical models of helicopter rotor noise
p0619 N78-32822
HAWKINS, W. H.
Where aerospace can serve afresh - Paths to energy independence
p0177 A78-23420
HAWKINS, W. R.
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
HAWLEY, K.
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
HAWTHORNE, W.
Aircraft propulsion from the back room /Sixty-sixth Wilbur and Orville Wright Memorial Lecture/
p0369 A78-36279
HAYAMI, H.
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
HAYASHI, C.
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058
HAYASHI, M.
A method for calculating the flow around arbitrary airfoil sections with separation
p0133 A78-20372
Performance calculation for multi-element airfoil sections with separation
p0133 A78-20375
HAYASHI, R. M.
Nickel/cadmium aircraft batteries: Battery alarm unit
[AD-A039521] p0310 N78-20631
Nickel/cadmium aircraft batteries: Rapid electrolyte exchange technique
[AD-A039335] p0311 N78-20632
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
HAYASHIDA, M.
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
HAYDEN, R. E.
Some advances in design techniques for low noise operation of propellers and fans
p0340 A78-35659
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
Prediction and reduction of rotor broadband noise
p0619 N78-32821
HAYES, C.
Effect of a simulated engine jet blowing above an arrow wing at Mach 2.0
[NASA-TP-1050] p0020 N78-10030
HAYBE, H. S.
Multipath fading simulation model and full-scale results
p0221 A78-25879
HAYS, A. P.
The common case study: Lockheed design of a supersonic cruise vehicle
[NASA-CR-158935] p0625 N78-33086
HAYWOOD, W. S., JR.
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
HAZIZA, E.
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
HEAD, R. E.
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 1: Materials, design and test
[AD-A046176] p0140 N78-14037
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process specifications
[AD-A046279] p0149 N78-15032
HEALY, R. D.
Station deselection procedures to support automatic Omega receiver operation
p0537 A78-49965
HEATH-SMITH, J. R.
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3798] p0143 N78-14158
HEAVENS, S. N.
An experimental study of sound diffraction at an airfoil trailing edge
p0176 A78-23247
HECHLER, B.
Proposal and construction of a hybrid flight-sight simulator with large picture projection
[DGLR PAPER 77-087] p0290 A78-31945
HECK, J. D.
Evaluation of F-16 radar attachment assemblies for reusable containers
[AD-A053424] p0459 N78-27432
HECK, P. H.
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094

Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
HEDSTROM, E.
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28
[NASA-TM-73250] p0079 N78-12011
HEERMAN, K. P.
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
HEFFLEY, R. K.
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117
Simulation and analysis of wind shear hazard
[NASA-CR-157470] p0504 N78-29699
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106
HEIDMANN, M. F.
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
HEILMANN, W.
Review of the development of small- and medium-capacity gas turbines at the Motoren- und Turbinen Union
[DGLR PAPER 77-061] p0116 A78-18702
HEIMES, F. J.
The ITC PHOTNAV system
p0074 A78-16536
HEINE, S.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
HEINE, W.
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075
HEINEMANN, H. J.
Determination of the vortex shedding frequency of cascade with different trailing edge thickness
p0347 N78-22067
HEINIG, H.
Ergonomics in commercial aircraft landing
p0371 A78-36621
HEINRICH, A. M.
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
HEISE, O.
New technologies for aircraft structures
p0382 A78-38803
HELENBROOK, B. G.
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
HELLAND, A. R.
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
HELLER, P. P.
Flying over the exclusive economic zone
p0281 A78-29945
HEMPEL, J.
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
Supporting project activities in the civil components program "Wing Section"
[BMFT-FB-W-77-26] p0350 N78-22084
HENSWORTH, M. C.
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
HENCKEN, A. D.
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085
HENDERSON, C.
V/STOL aerodynamic technology assessment
[AD-A054797] p0607 N78-32069
HENDERSON, H. R.
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
HENDERSON, J. A.
Fiber optic data buses for avionics - A systems view
p0066 A78-15656
HENDERSON, M. L.
Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
HENDERSON, R. E.
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
HENDERSON, T. E.
Weight and cost in the design arena
p0109 A78-17884
HENDERSON, W. P.
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
HENDRICK, R. C.
Adaptive control laws for F-8 flight test
p0013 A78-12358
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
HENDRICKSON, R. H.
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
HENNE, P. A.
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
HENNECKE, D. K.
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
HENSCHEL, F.
Determination of flight-tracking controllers using Solheim's pole-shifting method
p0074 A78-16415
HENSEL, R. W.
Energy conservation in aeronautical ground testing
p0002 A78-11103
HENSING, P. C.
Flutter analysis of a glider made of synthetic materials
[NASA-TM-75160] p0079 N78-12012
HENSLER, T.
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
FAA remote terminal system
[AD-A054604] p0493 N78-28295
HENTHORN, K. S.
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
HEPNER, T. E.
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
HEPNER, T. P.
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques
[NASA-TP-1168] p0325 N78-21410
HEPPEL, P. G. M.
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043

HEPWORTH, A. G.
Low-speed wind-tunnel tests of the longitudinal stability characteristics of some swept-wing quiet Airbus configurations
[ARC-R/M-3801] p0141 N78-14042
HERBST, W.
Integrated time, cost, and performance planning in aircraft development - Computer-aided project management in the development and construction of a modern aircraft
p0473 A78-44823
HERGET, W. F.
Non-extractive electro-optical measurement of jet-engine emissions
[AD-A056783] p0628 N78-33105
HERIBAN, E.
Properties of hydraulic servomotor controlled by flapper valve or by edge valve
p0277 A78-29587
Choice of engine design for small transport aircraft
p0283 A78-30357
HERLING, W. W.
Unsteady loads due to propulsive lift configurations. Part D: The development of an experimental facility for the investigation of scaling effects on propulsive lift configurations
[NASA-CR-156123] p0300 N78-20070
Investigations of scaling laws for jet impingement
p0393 N78-24074
HERMANN, R.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
HERMENS, C. A.
A statistical test of the calculated mean fatigue life using service experience
[FOK-S-144] p0440 N78-26138
HERMES, P. H.
Environmental tests and logistics support costs
p0061 A78-15560
HERRING, R. L.
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
HERRING, R. N.
Laminar leading edge stall prediction for thin airfoils
[AIAA PAPER 78-1222] p0424 A78-41903
HERRON, E. L.
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
HERTZBERG, A.
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
HESS, R. A.
Aircraft display design using analytical pilot models
p0113 A78-18068
Pilot centered requirements in control/display design
p0259 N78-19110
HESSELBROCK, H. J.
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings
[DLR-IB-152-75/25] p0044 N78-11204
HETT, W. D.
What's new in controller displays - Electronic flight strips and a color plan view display
p0597 A78-52979
HETTCHE, L. R.
Naval structural materials - Requirements, issues, and opportunities
p0583 A78-51149
HEUMANN, W.
Visual flight simulator for the investigation of the learning process during aircraft landing
p0569 A78-50302
HEWES, D. E.
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051
HEWISH, M.
Aero engines climb towards better fuel efficiency
p0372 A78-37114
Airliner numbers game - Does it add up
p0525 A78-49524
The shape of airliners to come
p0589 A78-51817
HEWLETT, H. W.
Design, construction and testing of a sub-scale turbojet test cell
[AD-A043005] p0044 N78-11126
A sub-scale turbojet test cell for design evaluations and analytical model validation
[AD-A049862] p0324 N78-21166
HEYSON, H. H.
Considerations in the design of tip-coupled air-transport systems
[NASA-TM-78645] p0147 N78-15001
TESTPLT: Interactive computer procedure for wind-tunnel-data management, retrieval, comparison, and plotting
[NASA-TM-78663] p0309 N78-20144
A brief survey of rotary wing induced-velocity theory
[NASA-TM-78741] p0450 N78-27085
Wind-tunnel testing of VTOL and STOL aircraft
[NASA-TM-78750] p0543 N78-30040
HEYWOOD, J. B.
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116
HIBNER, D. H.
Analysis and experimental investigation of the stability of intershaft squeeze film dampers. II - Control of instability
[ASME PAPER 77-DET-26] p0134 A78-20595
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
HICKEY, J. V.
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109
HICKEY, P. J.
A sub-scale turbojet test cell for design evaluations and analytical model validation
[AD-A049862] p0324 N78-21166
HICKS, R. E.
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116
HICKS, R. M.
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
HIDALGO, H.
The tropospheric and stratospheric composition perturbed by NO/x/ emissions of high-altitude aircraft
p0167 A78-21003
HIGASHI, K.
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
A study of fan-rotating noise reduction
p0577 A78-50620
HIGGINBOTHAM, R.
Multiprocessing for electronic warfare avionics
p0532 A78-49869
HIGGINSON, R. F.
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
HIGHBERGER, W. T.
Manufacture of titanium components by hot isostatic pressing
p0013 A78-12456
HIGHFILL, J. H., III
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
HIGHTER, W. H.
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
HIGHTOWER, F. C.
Conversion of a wind tunnel data acquisition

system to minicomputer control
p0106 A78-17373
HIGUCHI, S.
A research on centrifugal compressor for small gas turbine - The effect of recirculating flow
p0576 A78-50612
HILADO, C. J.
ALC/50/ values for some polymeric materials
p0371 A78-36596
HILAIRE, G.
Recent progress and technical and economic outlooks in the processing of materials for airframe elements
p0221 A78-26036
HILD, J.
How to make an airport unattractive to birds
p0275 A78-29209
HILEY, P. E.
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
HILL, G. E.
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
HILL, H. P.
The next generation of commercial aircraft - International perspective
p0057 A78-15087
HILL, J. S.
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105
HILL, J. T.
Design of rotors for improved structural life
p0027 N78-10085
HILL, R. J.
The answer to the engine deficiency' question
p0126 A78-19546
HILL, V. P.
A surface vorticity theory for propeller ducts and turbofan engine cowls in non-axisymmetric incompressible flow
p0593 A78-52648
HILL, W. G., JR.
Investigation of VTOL upwash flows formed by two impinging jets
[AD-A047805] p0205 N78-17025
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112
HILLERY, R. V.
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
HILSENROD, A.
The FAA Slant Visibility Range measurement system
p0056 A78-14996
HILTON, D. A.
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
HINCHEY, M. J.
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
Duct effects on the dynamic fan characteristics of air cushion systems
[UTIAS-TN-211] p0081 N78-12030
HINDES, D. K.
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
HINDSON, W. S.
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
HINELY, P. E.
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
HINES, R. W.
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
HINGST, W. R.
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
HIRAOKA, K.
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
HIRATA, M.
Near-hole region heat transfer in full-coverage film cooling
p0573 A78-50579
HIRATA, M.
Measurements of film cooling effectiveness distributions for exhausting through a double row of holes
p0573 A78-50578
HIRSCHKRON, R.
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
HIRSH, J. E.
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359
HIRSINGER, F.
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
HIRST, M.
The pilot's laser
p0059 A78-15375
Airborne navigation systems
p0170 A78-22347
Ground radar - Vital tool or luxury
p0289 A78-31869
Avionics first principles. IV - Automatic flight control
p0480 A78-45926
HITCHON, C. K.
Operational Software Concept OSC executive evaluation/refinement
[AD-A055902] p0618 N78-32754
HITT, E. F.
Digital avionics information system control and displays architecture
[AIAA 77-1515] p0008 A78-12260
HO, C. H.
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
HO, T. L.
Wear studies on aircraft brake materials
p0177 A78-23433
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
HOAD, D. R.
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques
[NASA-TP-1168] p0325 N78-21410
Externally blown flap impingement parameters
p0390 N78-24053
Helicopter noise research at the Langley V/STOL tunnel
p0619 N78-32826
HOBBS, V. J.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
HOCKER, A. J., JR.
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
HOCKER, R. G.
Weldbraze airframe components
[AD-A054042] p0504 N78-29457
HODGE, J. K.
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
HODGE, K. E.
Aircraft developments that hold promise for increased compatability with an advanced ATC

system
p0595 A78-52967
HODGE, R. J.
Profile of the airport-development crisis
p0282 A78-30244
HODGE, W. F.
VALT parameter identification flight test
p0480 A78-45439
HODGES, D. H.
A theoretical technique for analyzing aeroelastic stability of bearingless rotors
[AIAA 78-503] p0279 A78-29805
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
HOEFGEN, G.
The technical potential of instrument landing systems in the present and in the future
[DGLR PAPER 77-019] p0189 A78-24412
HOEFLE, R.
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
HOEGENAUER, E.
Alpha Jet - A European aircraft production program with a great future
p0470 A78-44616
HOEPPNER, D. W.
Application of fracture mechanics data to aerospace design
p0050 A78-13414
HOEPPNER, H.
Future development of commercial aircraft: Technological challenge - Economic constraints
[DGLR PAPER 77-005] p0188 A78-24402
HOERMANN, E.
Experimental analysis and selection of airborne antennas for aircraft-to-satellite communication systems
p0122 A78-19140
HOFER, K. E.
Determination of the principal mechanical properties of reinforced plastic laminates for aircraft
[AD-A043350] p0044 N78-11201
HOFF, R. H.
Development of the next commercial jet aircraft - What the powerplant can contribute
p0057 A78-15089
HOFFERT, M. I.
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816
HOFFMAN, J. B.
Evaluation of windshield materials subjected to simulated supersonic flight
[AD-A049981] p0317 N78-21101
HOFFMANN, E.
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
HOFFMANN, H. E.
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DLR-IB-553-75/9] p0146 N78-14895
HOFFMANN, H.-E.
Some test results concerning visibility of obstacle and hazard beacons
p0280 A78-29907
HOFFMANN, W. F.
The Boeing Aerodynamic Labs data system
[AIAA 78-789] p0295 A78-32346
HOFFNER, J.
A method of predicting stress corrosion cracking
p0468 A78-44105
HOFMAN, C. P. G. M.
Exploratory investigation of decelerating approaches of a twin-engined jet transport. Volume 2: Moving-base simulation and comparison with related experiments
[NLR-TR-76150-U] p0155 N78-15859
HOFMANN, D. J.
Assessment of atmospheric condensation nuclei associated with jet aircraft traffic
[AD-A054319] p0504 N78-29705
HOFMANN, L. G.
Digital control law synthesis in the w prime domain
p0507 A78-46962
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
HOFMANN, W.
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
HOFR, J.
Methods of reducing aircraft noise
p0283 A78-30355
HOGE, F.
Airborne Oceanographic Lidar System
p0053 A78-14878
HOH, R. H.
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
HOLBROOK, E. D.
B77 flight test data processing
[SAND-77-8010] p0082 N78-12049
HOLDEMAN, J. D.
Global atmospheric sampling program
p0040 N78-11076
HOLDER, D. W.
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
HOLDERBY, G. R.
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119
HOLFORD, D. M.
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
HOLLAAR, L. A.
Multi-system position determination - An innovative approach to low cost area navigation
[AIAA 77-1513] p0007 A78-12258
HOLLAND, M. J.
Project optimisation of military gas turbines with respect to turbine life
p0319 N78-21120
HOLLAND, R.
THREDE - A free-field EMP coupling and scattering code
p0126 A78-19580
HOLLAWAY, J. W.
Engineering methods in engine management
p0112 A78-18021
HOLLE, G. F.
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands
[NASA-CR-135307] p0459 N78-27427
HOLLIDAY, B. G.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
HOLLISTER, W. M.
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
HOLM, J.
Turboexpanders for energy conservation
p0588 A78-51621
HOLMA, G. M.
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
HOLMER, C. I.
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851

HOLMES, B. J.
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
HOLMES, H. K.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
HOLMS, A. G.
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
HOLPP, J. E.
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
HOLST, T. L.
Conservative implicit schemes for the full potential equation applied to transonic flows
[NASA-TM-78469] p0271 N78-19868
HOLT, M.
Calculation of supercritical flow past a double wedge by Telenin's method
p0011 A78-12301
HOLZHAUSEN, K.-P.
Touch input as alternative to keyboard and rolling ball for the radar controller at the display-screen place of operation in ground-based flight control
[DGLR PAPER 77-021] p0189 A78-24414
HOMANS, B.
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879
HON, R. H.
Preliminary Candidate Advanced Avionics System (PCAAS)
[NASA-CR-152026] p0024 N78-10061
HONEYCUTT, R. E.
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
HOOG, T. W.
Correlated data bases for the present and future
[AIAA 78-1583] p0579 A78-50662
HOOKE, F. H.
Safety against fatigue in flight: A perspective of Australian experience and research
p0553 N78-30272
Aircraft structural reliability and risk theory: A review
p0555 N78-30284
HOOPER, W. E.
Helicopter rotor vibration isolation
p0524 A78-49399
HOPKINS, A. L., JR.
Highly survivable integrated avionics
p0523 A78-49163
HOPPNER, P. W.
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
HOPPS, R. H.
Commercial air transport - The next ten years
p0058 A78-15091
Fuel efficiency - Where we are heading in the design of future jet transports
p0287 A78-31307
Correlation of wind-tunnel and flight-test data for the Lockheed L-1011 Tristar airplane
p0436 N78-26094
HORAK, C. R.
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085
HORANOFF, E. V.
Investigation of a side force due to ablation
p0571 A78-50457
HORIUCHI, S.
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
HORN, W. J.
Airfield pavement smoothness requirements
[AD-A050921] p0502 N78-29111
HORNE, D. H.
Eutectic anodizing of aluminum for extended service life
p0468 A78-44111
HOROWITZ, S. M.
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
HORSTMANN, K. H.
New model upwind distributions and their influence on the design of gliders
[DLR-IB-151-76/12] p0488 N78-28062
HORTON, E. F.
Adhesive bonded aerospace structures standardized repair handbook
[AD-A055684] p0614 N78-32270
HOSKIN, B. C.
Fracture mechanics fundamentals with reference to aircraft structural applications
p0554 N78-30274
HOSTETLER, J. D.
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
HOSTETLER, L. D.
Optimal terrain-aided navigation systems
[AIAA 78-1243] p0540 A78-50163
HOTTNER, T.
Application of cryogenics in experimental aerodynamics
p0522 A78-48982
HOTZ, G. M.
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14998
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
HOUBOLT, J. C.
Airplane design for gusts
p0267 N78-19717
HOUCK, J. A.
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
HOUDEVILLE, R.
Research on unsteady turbulent boundary layers
p0146 N78-14992
HOUGHTON, D. E. A.
Air-to-air combat simulation
p0510 A78-47868
HOULT, D. P.
Soot formation in a turbulent swirling flow
p0040 N78-11075
HOUSE, R. E.
Integrally stiffened laminate construction
p0370 A78-36431
HOUSE, T. L.
Approaches to combat damage repair
p0491 N78-28089
HOUSTON, R. J.
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle
p0263 N78-19144
HOUTMAN, W. H.
General aviation piston-engine exhaust emission reduction
p0040 N78-11073

HOVIS, W. A., JR.
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
HOWARD, P. J.
Development of a load sequence for a structural fatigue test
p0554 N78-30277
HOWE, M. S.
On the noise generated by an imperfectly expanded supersonic jet
p0341 A78-35769
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
HOWELL, T. F.
The MAROTS maritime satellite programme
p0227 A78-27049
HOWELL, W. E.
Integrated controls for a new aircraft generation
p0231 A78-28219
HOWELLS, R. W.
Finite element analysis for complex structures, helicopter transmission housing structural modeling
[AD-A052759] p0397 N78-24126
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
HOWLETT, J. J.
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
HOWLETT, R. A.
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
Integrated control systems for advanced supersonic engines
[AIAA PAPER 78-1050] p0466 A78-43575
Advanced supersonic propulsion study, phase 4
[NASA-CR-135273] p0038 N78-11062
HOY, J. M.
Active controls technology to maximize structural efficiency
p0497 N78-29053
HRISTIC, D.
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
HRUBY, R. J.
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
HSING, F. C.
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
HSUEH, S. F.
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
HU, P. W.
Replacement process analysis: An interim report on replacement models
[AD-A052411] p0399 N78-24150
HUBANS, F., JR.
A hierarchical network for avionic systems
p0532 A78-49868
HUBBARD, H. B.
Terminal airspace/airport congestion delays
p0330 A78-33121
HUBER, F. R.
VHF/UHF direction-finding in air traffic control
p0217 A78-25046
HUBER, J. C., JR.
Smart dispensing with the AN/ALE-39 and derivative dispenser systems
p0054 A78-14937
HUBER, P. W.
Toward scramjet aircraft
p0177 A78-23421
HUBLEY, D. G.
Planning and design of small airports in Canada
p0341 A78-35668
HUCK, K. L.
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099
HUESCHEN, R. M.
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
HUFFMAN, J. K.
Calibration and test capabilities of the Langley 7- by 10- foot high speed tunnel
[NASA-TM-X-74027] p0043 N78-11121
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
HUGGETT, C.
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
Time-dependent fire behavior of aircraft cabin materials
[AD-A050923] p0324 N78-21234
HUGHES, I.
AIDS - Aircraft-integrated-data-system
p0600 A78-53675
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
HUGON, P.
Considerations on the selection of a radionavigation system for the coasts of France
p0073 A78-16352
HUHTANEN, P. H.
Maintenance of gas turbine accessory equipment
p0597 A78-53175
HUININK, B.
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
HULTBERG, R. S.
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
HUMBRICKHOUSE, C. E.
CF6 jet engine performance deterioration results
p0446 N78-27049
HUMPHREY, R. E.
B77 flight test data processing
[SAND-77-8010] p0082 N78-12049
HUMPHRIS, R. R.
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
HUNDEMANN, A. S.
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600
HUNT, B. L.
The aerodynamic performance of a freely hinged door between two flows
p0586 A78-51464
HUNT, J. L.
Calculated heating on the afterbody nozzle of a

hypersonic aircraft concept
p0072 A78-16186
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
HUNT, J. S.
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
HUNTER, L. B. R.
Transport Canada airfield pavement load evaluation
p0526 A78-49678
HUNTER, W. H.
Aviation fuels beyond the 1980's
[NASA-TM-79510] p0442 N78-26223
HUSAIN, Z.
Design of long blades by method of constant circulation
p0122 A78-19230
HUSBAND, J. D. W.
British Military helicopter programmes
p0262 N78-19130
HUSSAIN, M. I.
Shear buckling of corrugated plates with quasi-sinusoidal corrugations
p0616 N78-32458
HUTCHERSON, D. C.
The helicopter route selection model (DYNFLITE)
[AD-A045094] p0096 N78-13047
HUTCHINGS, D. E.
Review of US Navy VSTOL handling qualities requirements
p0258 N78-19104
HUTCHINSON, W. H.
GDM/GPS receiver hardware implementation
p0062 A78-15589
HUTCHISON, H. H.
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
HUTH, H.
The collection and analysis of fatigue damage occurring in aircraft in service
[RAE-LIB-TRANS-1934] p0349 N78-22077
HUTTSELL, L. J.
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Close encounters of the aeroservoelastic kind
[AIAA 78-1289] p0542 A78-50196
HWANG, C.
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
A non-Gaussian gust model for aircraft response analysis
[NOR-76-223] p0265 N78-19165
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128
HWANG, Y. H.
Surface current and charge density induced on aircraft
p0169 A78-21990
HWOSCHINSKY, P. V.
A single site passive collision avoidance system
p0111 A78-17912
HYDE, H. H.
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285

I

IAKOVLEV, V. N.
Electronic aircraft collision avoidance system
p0376 A78-37603
IAKOVLEV, V. P.
Investigation of turbine stages with radial blades
p0467 A78-43643
IAKSHIN, A. A.
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
IANOVSKII, L. S.
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
IARENCHUK, IU. F.
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
IDIALTULLIN, N. S.
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
IGLEHART, S. C.
Some results on digital chirp
p0222 A78-26160
IGNATOV, A. A.
Observational computation in the case of redundant measurements
p0176 A78-23133
IGONIN, V. I.
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
IKUI, T.
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609
ILAN, D.
Performance of the ARAVA aircraft with wing-tip winglets
p0282 A78-30256
ILCHENKO, M. A.
Study of the propagation of higher modes in cylindrical ducts with impedance walls
p0221 A78-25773
ILES, J. E.
Shipboard testing of the AV-8A Harrier
p0259 N78-19108
ILICHEV, V. D.
Matrix methods for the synthesis of the dynamic and elastic characteristics of linear nonconservative structures
p0127 A78-19656
ILIFF, K. W.
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
ILINA, A. S.
The supersonic flow past cusped wings
p0230 A78-28056
Supersonic flow over sharp-edged wings
p0480 A78-46091
ILINSKII, A. S.
Current and scattering field of a long short-circuited receiving vibrator
p0339 A78-35467
ILNITSKII, L. IA.
Probabilistic model of an instrument landing system
p0509 A78-47407
Communication and navigation antennas for aircraft
p0522 A78-48523
IMBERT, N.
Strategic positioning and traffic regulation in the terminal zone
p0217 A78-25150
Accurate timing in landings through air traffic control
p0433 N78-26067
IMES, R. S.
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
INGALLS, H. L.
Circles, texture, etc. - Alternate approaches to CIG scene detail
[AIAA 78-1578] p0579 A78-50659
INGEBO, R. D.
Effect of airstream velocity on mean drop diameters of water sprays produced by pressure and air atomizing nozzles

p0329 A78-33111
INGER, G. R.
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185
INNIS, R. C.
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
INOUE, M.
Calculation of cascade flow by means of spline fit singularity
p0576 A78-50606
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609
INOUE, S.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
IOANNOU, M.
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
IRBITIS, K.
Some opportunities in the development of light aircraft
p0112 A78-18036
IRONS, J. J.
The use of the AIAA-Bendix Design Competition in aerospace design courses
[AIAA PAPER 78-1488] p0514 A78-47931
IRVOAS, J.
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
ISAAC, S.
Computer aided design of aircraft electrical systems
p0479 A78-45410
ISHIHARA, K.
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
ISHII, H.
A new method of nozzle design
p0416 A78-40839
ISHIMITSU, K. K.
Design and analysis of winglets for military aircraft, phase 2
[AD-A046152] p0140 N78-14035
ISHIOCHI, T.
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
ISHIZAWA, K.
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406
A study of fan-rotating noise reduction
p0577 A78-50620
ISKHAKOV, I. A.
An evaluation of weight optimization of aircraft radioelectronic equipment
p0174 A78-22646
Evaluating avionics weight efficiency
p0518 A78-48228
ISMAIL, A.
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
ISOGAI, K.
Numerical study of transonic flow over oscillating airfoils using the full potential equation
[NASA-TP-1120] p0313 N78-21055
ISTOMINA, L. G.
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
ISUPOV, G. P.
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
ITO, S.
Film cooling of a gas turbine blade
p0573 A78-50580
ITOH, T.
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
Development of the experimental gas turbine bus
p0575 A78-50601
ITZKAN, I.
Airborne Oceanographic Lidar System
p0053 A78-14878
IUDELOVICH, M. IA.
Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469
IUDIN, V. A.
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
IUDINA, R. N.
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
IUGOV, O. K.
Optimal control of aircraft powerplant
p0597 A78-53119
IURCHENKO, IU. S.
Investigation of the accuracy of one-way range measurements
p0476 A78-45158
IUSHIN, A. IA.
Experimental study of the effect of angle of attack on laminar-to-turbulent boundary layer transition near the under surface of delta plates with sharp edges
p0126 A78-19631
IUSHIN, V. P.
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
IVANCHINOV-MARINSKII, N. N.
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
IVANNIKOV, V. P.
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
IVANOV, S. N.
Rational parameters of reinforced panels operating under conditions of unsteady heating
p0164 A78-20881
Economical method for calculating unsteady temperature fields in thin-walled aircraft structures
p0165 A78-20903
IVANOV, V. G.
Investigations of the intensity of oscillations of the boundary of a turbulent wake
p0586 A78-51402
IVANOV, V. IA.
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
IVANOV, V. K.
Analytical design of an automaton for the longitudinal control of an aircraft
p0292 A78-32262
IVCHENKO, V. M.
Isoperimetric problems of the theory of supercavitated mechanisms
p0477 A78-45172
IVERSEN, J. D.
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-10/] p0158 A78-20687
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Laser-velocimeter surveys of merging vortices in a wind tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043

IVERSON, M. W.
Modular target acquisition and designation systems
p0536 A78-49954
IVES, D. C.
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
IVEY, L. J.
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
IVLIEV, A. V.
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
IYER, R. R.
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
IZADPANAH, G.
Modernization program for the Iranian National Airspace System
p0596 A78-52971

J

JAARSMA, F.
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
JACK, K. H.
New materials in the Si-C-Al-O-N and related systems
p0601 A78-53864
JACKSON, A.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
JACKSON, C. T., JR.
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
JACKSON, L. E.
Aviation futures to the year 2000
p0595 A78-52966
JACKSON, R. C. P.
The next commercial jet transport - A manufacturer's view
p0058 A78-15093
JACKSON, T. A.
Fuel hydrogen content as an indicator of radiative heat transfer in an aircraft gas turbine combustor
p0330 A78-33114
JACOB, K.
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012
JACOBS, P. F.
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds
[NASA-TN-D-8474] p0299 N78-20065
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
Experimental results of winglets on first, second, and third generation jet transports
p0496 N78-29048
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
JACOBSEN, R. A.
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
JACOBSON, I. D.
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
Concorde - Ride quality and passenger reactions
p0418 A78-41166
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
Model of aircraft passenger acceptance
p0526 A78-49684
Demand modelling of passenger air travel: An analysis and extension, volume 2
[NASA-CR-157402] p0545 N78-30069
JACQUES, A.
Aircraft R-Nav system connected on optical bus
p0054 A78-14941
JAKOB, H.
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
German Army helicopter development and prospects for the future
p0261 N78-19128
JAMES, A. M.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
Development of advanced composite structures
p0448 N78-27062
JAMES, D. G.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
JAMES, W. D.
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
JAMESON, A.
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
Numerical calculation of transonic flow past a swept wing by a finite volume method
[NASA-CR-157012] p0403 N78-24808
JANES, H. B.
Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439
JANOSKY, M.
Sanders AN/PYK-14 - Bridging the gap between mission control and air traffic control
p0594 A78-52954
JANTZEN, E.
Recent results on early diagnosis of damage in moving parts of aircraft engines
p0115 A78-18506
JANUS, M. P.
Applications for airborne digital communications
p0590 A78-51896
JARBOE, K.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
JAUDON, J. B.
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
JAY, A.
JT9D jet engine performance deterioration
p0446 N78-27050
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
JAY, R. L.
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a

compressor stator
[AD-A050648] p0352 N78-22106
JEFFERSON, F. W.
Satellite communications mode simulation tests for oceanic air traffic control
[AD-A052546] p0458 N78-27313
JEFFERY, C. B.
Navigating Canada, to the end of the twentieth century
p0111 A78-17907
JELLINEK, E.
Bearing study program
[AD-A049767] p0314 N78-21068
JENKINS, J. L., JR.
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle
p0263 N78-19144
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
JENKINS, J. M.
Strain gage calibration of a complex wing
p0071 A78-16182
Recent load calibrations experience with the YF-12 airplane
p0605 N78-32057
JENKINS, R. C.
Investigation of VTOL upwash flows formed by two impinging jets
[AD-A047805] p0205 N78-17025
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112
JENNEY, G. D.
Research and development of aircraft control actuation systems. The development of a direct drive fly-by-wire flight control system and evaluation of a force sharing fly-by-wire actuator
[AD-A047283] p0200 N78-16065
JENNINGS, R. R.
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337
JENNINGS, W. P.
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
JERNELL, L. S.
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
JEWELL, W. F.
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106
JHA, S. K.
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721
JINBOH, K.
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
JOBE, C. E.
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
JODELET, F.
Some specific hydrodynamic and aerodynamic problems of surface-effect ships with sidewalls
p0286 A78-31126
JOGLEKAR, A. M.
Future domestic air navigation system analysis
[M77-52] p0111 A78-17904
JOHANSSON, B. C. A.
Compressible flow about helicopter rotors
p0372 A78-36947
JOHARI, O.
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
JOHNSEN, R. L.
Altitude test of several afterburner configurations on a turbofan engine with a hydrogen heater to simulate an elevated turbine discharge temperature
[NASA-TP-1068] p0041 N78-11106
JOHNSON, C. B.
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
JOHNSON, D. A.
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
JOHNSON, D. M.
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
JOHNSON, E. S.
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
JOHNSON, F. T.
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
JOHNSON, H. W.
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
JOHNSON, J. P.
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
JOHNSON, J. L., JR.
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
JOHNSON, K. G.
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138
JOHNSON, M. E.
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314
JOHNSON, P. E.
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
JOHNSON, R. C.
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004
JOHNSON, R. M.
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087
JOHNSON, S. H.
Aircraft model prototypes which have specified handling-quality time histories
[NASA-CR-143848] p0142 N78-14054
JOHNSON, T. G.
CAD/CAM data management needs, requirements and options
p0635 N78-33778
JOHNSON, T. W.
Primary flight control actuation with electric

motors
p0067 A78-15689
A qualitative analysis of redundant asynchronous operation
p0531 A78-49863
JOHNSON, W.
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
Comparison of measured and calculated helicopter rotor impulsive noise
[NASA-TM-78473] p0311 N78-20917
JOHNSON, W. D.
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
JOHNSON, W. G., JR.
Some measurements of an EBF powered-lift wake
p0390 N78-24054
JOHNSON, W. S.
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
JOHNSTON, B. B.
An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
JOHNSTON, E. W.
Technology analysis - Candidate advanced tactical fighters
[AIAA PAPER 78-1451] p0528 A78-49782
JOHNSTON, J. F.
Development and flight evaluation of active controls in the L-1011
p0496 N78-29051
JOHNSTON, M. B.
F-16 flight test progress report
p0232 A78-28452
JOHNSTON, R. E.
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
JOHNSTON, R. P.
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
JOHNSTON, S. L.
Radar electronic counter-countermeasures
p0222 A78-26159
JOHNSTON, W.
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
JOHNSTON, W. A.
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
JONCHERAY, P.
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025
JONDA, W.
IDS - An advanced hingeless rotor system
p0372 A78-36950
JONES, C. R.
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
JONES, H. L.
Comparisons of high anti-jam design techniques for GPS receivers
p0530 A78-49857
JONES, J. C.
Aircraft ride-bumpiness and the design of ride-smoothing systems
p0431 N78-26053
JONES, J. L.
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
JONES, R.
Flight evaluation of helicopter rotor isolation system
p0331 A78-33445
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 1: Summary report
[AD-A051318] p0396 N78-24118
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 2: Detailed report
[AD-A051319] p0396 N78-24119
JONES, R. A.
Toward scramjet aircraft
p0177 A78-23421
JONES, R. E.
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43944
Gas turbine engine emissions - Problems, progress and future
p0524 A78-49336
Emissions reduction technology program
p0039 N78-11065
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
JONES, W. L.
State-of-the-art of turbofan engine noise control
p0340 A78-35658
JONES, W. S.
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
JORDAN, F. L., JR.
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
Thrust-augmented vortex attenuation
p0080 N78-12024
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
JORDAN, P. F.
Reliable lifting surface solutions for unsteady flow
[AIAA PAPER 78-228] p0161 A78-20757
JORDAN, T. D.
An analytical and experimental study of the dynamic response of a semi-monocoque aircraft wing structure
p0348 N78-22072
JORGENSEN, D. B.
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
JORGENSON, W. E.
Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107
JOSHI, D. S.
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
JOSHI, M. C.
Acoustic investigation of upper surface blown flaps
p0092 N78-13005
JOY, W.
Advanced supersonic propulsion study, phases 3 and 4
[NASA-CR-135236] p0097 N78-13058
JUHASZ, A. J.
Emissions control for ground power gas turbines
p0039 N78-11072
JUROSHEK, J. R.
Flight tests of digital data transmission
p0285 A78-31050

K

KABE, Y.
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines

[NAL-TR-517] p0409 N78-25093
KABELAC, J.
Triangulation using high-flying targets on aircraft in the case of direction and range measurements
p0343 A78-36111
KACHANOV, B. O.
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
KACZMARCZYK, J.
Remarks on design of supersonic wind tunnels
p0369 A78-36216
KADLEC, P. W.
Satellite images to aircraft in flight
p0056 A78-14982
KADMAN, Y.
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
KADOTANI, K.
On the nature of jets entering a turbulent flow. A - Jet-mainstream interaction. B - Film cooling performance
p0573 A78-50582
KADYSHEV, I. K.
Aviation control system devices
p0529 A78-49850
KAEHLER, H. B.
Improved resistance to engine bird ingestion
[AD-A044203] p0041 N78-11105
KAFKA, P. G.
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads
[NASA-CR-135395] p0454 N78-27124
KAHANEK, V.
Basic fatigue curves of aircraft structures
p0283 A78-30356
Fatigue life analysis of the L 13 /Blanik/ glider
p0283 A78-30360
KAHN, A. E.
The changing environment of international air commerce
p0592 A78-52448
KAI, T.
Optimal control theory (OWEM) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
KAIBARA, M.
Decay and modification of trailing vortex
p0230 A78-27908
KAIL, K. A., IV
Unsteady, surface pressure and near-wave hotwire measurements of a circulation control airfoil
[AD-A050025] p0313 N78-21061
KAIN, J. E.
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055
KAISER, R. P.
Pilot model air cushion vehicle (LACV-30) program
[AD-A053686] p0492 N78-28275
LACV-30 auxiliary power unit investigation
[AD-A053566] p0492 N78-28277
KAITATZIDIS, M.
Inspection of carbon fibre parts after fabrication and during service
p0444 N78-26476
KAJITA, S.
Development of the can-type gas turbine combustors
p0574 A78-50590
KAKIMOTO, Y.
A review of human factors investigation studies in aircraft accidents during the period 1957-1977 in Aeromedical Laboratory, JASDF
p0587 A78-51497
KALAFUS, R. M.
Requirements for an airport ground-based wind shear detection system
p0056 A78-14986
KALBEN, P.
Computation of steady and periodic two-dimensional nonlinear transonic flows in fan and compressor stages
p0010 A78-12292
KALEV, I.
Structural wing-fuselage static interaction by a combined method of tests and numerical analyses
p0071 A78-16181
KAMCHI, J. S.
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
KAMIYA, N.
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
KAN, S.
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
KANAFANI, A.
An investigation of short haul air transportation in the southeastern United States
[NASA-CR-152166] p0451 N78-27094
KANDIDOV, V. P.
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
KANDIL, O. A.
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
KANDLER, W. D.
System measurement improves computer responses to the controller
p0596 A78-52974
KANE, D. L.
Design and construction of a flight monitor and data recorder
[AD-A052405] p0398 N78-24135
KANE, G. R.
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
KANGOVI, S.
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
KANISS, A. M.
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 30 June 1977
[AD-A047857] p0207 N78-17045
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 31 December 1977
[AD-A055672] p0562 N78-31098
KANN, B.
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
KANNAMUELLER, G.
Tethered RPV-rotorcraft
p0263 N78-19141
KAPLUN, A. B.
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
KAPOOR, S. G.
Runway roughness characterization by DDS approach
p0284 A78-30679
KAPRELIAN, A. S.
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028
KARAMCHETI, K.
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
KARASHIMA, K.
Second order transonic small perturbation flow
p0424 A78-42198
KARCHMER, A.
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
KARIAKIN, V. E.
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies

p0186 A78-24096
KARKALIK, F. G.
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075
KARLINA, L. P.
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
KARLINSKI, W.
Engineering aluminum alloys for subsonic airframes
p0053 A78-14087
KARMARKAR, J. S.
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Remotely piloted aircraft in the civil environment
p0283 A78-30506
KAROVIC, S.
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
KARPATI, G.
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
KARPENKO, B. K.
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
KARPLUS, W. J.
Peripheral processors for high-speed simulation
p0052 A78-14063
KASHCHERV, G. V.
Aircraft radar systems
p0377 A78-37873
KASHCHUK, I. A.
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
KASHIWAGI, I.
Ignition of a liquid fuel under high intensity radiation
[AD-A054974] p0614 N78-32199
KASPER, M. W.
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125
KASPRUK, E. W.
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
KATAOKA, M.
Broadband noise in axial-fan blade cascade
p0579 A78-50650
KATHEDER, F.
Test report on the application of the Linde fog removal equipment at the Erding air base
[DLR-IB-75/8] p0145 N78-14763
KATHIRESAN, K.
Stress analysis of typical flaws in aerospace structural components using 3-D hybrid displacement finite element method
[AIAA 78-513] p0279 A78-29812
KATO, K.
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
KATONA, M. G.
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
KATSANIS, T.
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
KATSUMATA, I.
Near-hole region heat transfer in full-coverage film cooling
p0573 A78-50579
KATT, D. R.
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
KATT, G. T.
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
KATZ, E.
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
KATZ, J.
Optimization of the cooling system of an air-cooled internal combustion engine
p0419 A78-41510
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
KAUFFMAN, C. W.
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
KAUFMAN, A.
Turbine disks for improved reliability
p0027 N78-10089
KAUFMAN, H.
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
KAUFMAN, J. L.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
KAUSCHE, G.
Description of the new regulating valve for the transonic supersonic wind tunnel
[DLR-IB-151-76/6] p0044 N78-11130
KAUTZ, R.
Electronic converter electric power supply /ECEPS/ - KC-135
[SAE PAPER 771003] p0181 A78-23837
KAVEBIN, A. I.
Optimization of linear stabilization systems of flight vehicles on the basis of orthogonal filters
p0293 A78-32270
KAWAGUCHI, N.
Swirl flow in conical diffusers
p0230 A78-27910
KAWAGUCHI, O.
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
KAWAGUTY, K.
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
KAWALL, J. G.
Spanwise structure of the plane turbulent wake
p0221 A78-25777
KAWASHIMA, T.
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
An automatic processing system for vibration data analysis of gas turbine engines
p0578 A78-50623
KAZA, K. R. V.
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
KAZAKOV, V. A.
Determination of pressure impulses at supersonic delta wings with incident weak shock waves
p0129 A78-19729
KAZMIERSKI, A. J.
Filtering techniques in avionic transmitters
p0384 A78-39084
KEBLAWI, F. S.
Controller productivity in the pre-data link era
p0064 A78-15635
KEE, E.
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
KEEFFE, B. E.
Vortex advisory system simulation of Chicago

O'Hare Airport
[AD-A057112] p0625 N78-33069
KEEL, A. G., JR.
Influence of surface roughness on skin friction and heat transfer for compressible turbulent boundary layers
[AIAA PAPER 77-178] p0593 A78-52629
KEEWAN, M. G.
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
KEESEE, J. E.
A technique for vorticity measurement in unsteady flow
[AIAA 78-801] p0295 A78-32356
KEFFER, J. F.
Spanwise structure of the plane turbulent wake
p0221 A78-25777
KEIN, V. M.
Automatic control of airplanes and helicopters
p0015 A78-12849
KELDYSH, V. V.
The lifting force of a low-aspect-ratio wing and body combination
p0129 A78-19709
The effect of blunting the leading edge of a delta wing on its aerodynamic characteristics during supersonic flight
p0166 A78-20920
KELLER, R. L.
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
KELLEY, W. W.
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
KELLS, R. E.
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
KELLY, C. P.
V/STOL hover stability impact on hover control task
p0258 N78-19102
KELLY, M. W.
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
KELLY, R. J.
Landing aircraft under poor conditions
p0525 A78-49549
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904
KELLY, R. T.
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
KELLY, T. J.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
KELLY, W. L.
Investigation of a high speed data handling system for use with multispectral aircraft scanners
[NASA-TM-78689] p0310 N78-20481
KELTO, C. A.
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
KEMP, J. L.
Sensitivity of the Shoe-Box in P001 analysis
[AD-A043707] p0038 N78-11055
KEMP, N. H.
Simplified formulas for lift and moment in unsteady thin airfoil theory
p0474 A78-44909
KEMPKE, E. E., JR.
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
KEMPTON, A. J.
The noise from the large-scale structure of a jet
p0227 A78-27144
KENDALL, J. M.
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Resolution enhanced sound detecting apparatus
[NASA-CASE-NPO-14134-1] p0271 N78-19898
KENDALL, W. F., JR.
F-15/16 canopy off testing
p0233 A78-28453
KENNEDY, F. E.
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
KENNEDY, J. L.
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
KENNEY, E. A.
The design and simulation of a takeoff stabilization system for an aircraft with an air cushion landing system
[AD-A053220] p0440 N78-26137
KENT, D. R.
Correlation of F-16 aerodynamics and performance predictions with early flight test results
p0436 N78-26092
KENT, H.
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
KENT, H. M.
Unfulfilled needs of non-destructive inspection of military aircraft
p0443 N78-26464
KENTFIELD, J. A. C.
The prediction of the performance of low pressure-ratio thrust-augmenter ejectors
[AIAA PAPER 78-145] p0159 A78-20704
KENTON, E.
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
Urban noise pollution. A bibliography with abstracts
[NTIS/PS-78/0686/2] p0634 N78-33634
KENWORTHY, M. J.
Augmentor emissions reduction technology program
[NASA-CR-135215] p0097 N78-13057
KENYON, R. E.
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
KEPPEL, B. V.
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
KERBS, D.
A high-power switching network for a dual-mode antenna
p0383 A78-38844
KERR, R. J.
Development of an on-board minicomputer system
p0124 A78-19435
KERREBROCK, J. L.
Aircraft engines and gas turbines
p0113 A78-18400
KESHOCK, E. G.
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
KESHU, S. C.
Introduction of NC machines in aircraft industry
p0123 A78-19411
KESKAR, D. A.
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
KESSEL, W. C.
Global stability and control analysis of aircraft

at high angles-of-attack
[AD-A051850] p0363 N78-23103
KETCHAM, S. J.
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188
KEYPITZ, B. L.
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
KHACHATURIANTS, L. S.
Safety of space flights
p0516 A78-47952
Operator work capacity during parachutist free-fall
p0517 A78-47978
KHAIKIN, M. D.
Increasing the resources of jet fuels
p0003 A78-11699
KHAIMOVICH, I. A.
Onboard radio-navigation and landing aids for aircraft
p0473 A78-44806
KHALIL, I.
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
KHARCHENKO, V. M.
Organization of a programmed matrix-operation system in an airborne digital computer
p0192 A78-24585
KHARCHENKO, V. N.
Experimental investigation of the supersonic gas flow past a rectangular wing
p0129 A78-19715
KHARITONOV, A. M.
Interaction of turbulent boundary layers in a right-angle corner
p0588 A78-51697
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19048
KHARITONOV, V. T.
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
KHIZHNIAK, A. N.
Mathematical planning and bulk service methods of civil aviation
p0015 A78-13000
KHLEBNIKOV, V. S.
Rearrangement of the flow between a pair of bodies, one of which is situated in the other's wake, in supersonic flow
p0165 A78-20913
KHOKHLACHEVA, M. V.
Increasing the resources of jet fuels
p0003 A78-11699
KHOLIAVKO, V. I.
Calculation of the induction of wind tunnels
p0132 A78-20277
KHOMUTOV, V. A.
Sudden expansion of a supersonic jet in a cylindrical duct
p0128 A78-19670
KHOROLSKII, V. M.
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
KHOURY, G.
A solar airship - More than a flight of fancy
p0469 A78-44226
KHRAPOVITSKII, V. G.
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251
KHRESIN, I. N.
Aircraft radar systems
p0377 A78-37873
KHRUNOV, E. V.
Safety of space flights
p0516 A78-47952
KHURASIA, H. B.
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
KHVILON, E. A.
Stress-strain state of simply-supported three-layer trapezoidal plates
p0168 A78-21205
KIBBEE, G. W.
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118
KIDA, T.
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
KIDDLE, F. E.
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3798] p0143 N78-14158
KIEFER, F. W.
Model study of dynamic response of landing mat
p0117 A78-18755
KIEKEBUSCH, B.
Design of a transonically profiled wing
[DGLR PAPER 77-026] p0189 A78-24417
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
Design of a transonically profiled wing
[NASA-TM-75440] p0604 N78-32052
KIENAPPEL, K.
Investigations on unsteady pressure distribution measurements in rotating systems
[DLR-FB-77-43] p0566 N78-31135
KIEZELIS, A.
Optimization of the structure of the LOT Polish Airlines fleet for the requirements of international passenger transport
p0588 A78-51598
KIHLGREN, B.
Rolling resistance of aircraft wheels in dry snow
[VTI-128] p0140 N78-14041
KIHM, R. T.
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
KIKUCHI, H.
Neutralization problem for a Space Shuttle
p0507 A78-47124
KILLIAN, D. C.
The impact of flight simulators on U.S. airlines
p0382 A78-38798
KILNER, J. R.
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
KIM, K. H.
Study of the turbine engine industry
[AD-A055895] p0612 N78-32103
KIMBERLEY, D.
A pyramid skewed axis sensor set for multiplex flight control systems
[ARC-R/M-3808] p0553 N78-30143
KIMERLING, A. J.
Moving target analysis utilizing side-looking airborne radar
p0105 A78-17196
KINZEY, W. F.
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
[AD-A043543] p0029 N78-10107
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
KIND, R. J.
An analysis method for the viscous flow over circulation-controlled airfoils
[AIAA PAPER 78-157] p0160 A78-20710
KINELEV, V. G.
The effect of fluid oscillations in a fuel line on the pressure head of a pump operating in a regime without reverse streams
p0187 A78-24259
KING, H. E.
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368

KING, R. W.
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
KING, W. F.
Airframe noise, the lower noise limit for aircraft
[DGLR PAPER 77-052] p0191 A78-24441
KINNEY, R. B.
Analysis of unsteady viscous flow past an airfoil. I - Theoretical development
p0076 A78-16809
Analysis of unsteady viscous flow past an airfoil. II - Numerical formulation and results
p0176 A78-23185
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
KINOSHITA, Y.
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
KIRBY, D. A.
Low-speed wind-tunnel tests of the longitudinal stability characteristics of some swept-wing quiet Airbus configurations
[ARC-R/M-3801] p0141 N78-14042
KIRIANOVA, A. A.
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
KIRK, D.
Application of X-ray diffraction stress measuring techniques
p0443 N78-26467
KIRPIKIN, A. A.
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
KISH, J. G.
Advanced overrunning clutch technology
[AD-A052635] p0403 N78-24557
KISH, J. J.
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
KISLIN, B.
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
KITAJIMA, J.
Development of the can-type gas turbine combustors
p0574 A78-50590
KITANO, M.
The development of a regenerator seal for vehicular use
p0574 A78-50587
KITCHENSIDE, A. W.
Applications of carbon fibre composites in commercial aircraft
p0105 A78-17253
KITTREDGE, G. D.
Environmental protection agency aircraft emissions standards
p0038 N78-11064
KITZMILLER, D. E.
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
KIZIRNIS, S. W.
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
KLARMAN, A. F.
Evaluation of an automated smoke abatement system for jet engine test cells
[AD-A044587] p0089 N78-12107
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079
Effect of fuel bound nitrogen on oxides of nitrogen emission from a gas turbine engine
[AD-A048382] p0264 N78-19162
KLASS, P. J.
Soviet landing aid draws FAA scrutiny
p0381 A78-38773
KLASSEN, H. A.
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
KLEINMAN, L.
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
KLEIN, H.
YC-14B prototype testing
p0233 A78-28459
KLEIN, V.
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
KLEINE, J. C.
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
KLEINERT, H.-J.
10 years of contract research for the pump/compressor industrial concern
p0523 A78-49175
KLEITZ, P.
An operator's viewpoint: How to reduce the fuel consumption in aeronautical maintenance
[AAAF-NT-77-26] p0397 N78-24129
KLENNER, J.
Sailplanes of carbon-fiber construction
p0382 A78-38804
KLESNIL, M.
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
KLEVENHUSEN, K. D.
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
KLEVENHUSEN, K.-D.
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
KLIACHKIN, A. L.
Operating characteristics of bypass turbojet engines
p0540 A78-50125
KLIJN, M. M.
Single bladed torqueless helicopter design
[AD-A045375] p0097 N78-13052
KLIMAS, P. C.
Compressibility effects on parachute transient pressures
p0591 A78-51950
KLIMOVA, T. V.
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
KLINE, J. F.
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
KLINE, W. G.
Performance evaluation of thin layer thermoelectric device
[AD-A045361] p0103 N78-13918
KLINEBERG, J. M.
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
KLINGER, G.
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints
[DLR-FB-77-63] p0567 N78-31251
KLINK, D. M.
Characterization of secondary ignition sources in unattended compartments and full-scale baseline test
[NASA-CR-151573] p0094 N78-13028
KLOBUCHAR, J. A.
Ionospheric effects on satellite navigation and air traffic control systems
p0365 N78-23325
KLOETZLI, J. W.
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft

[AD-A055286] p0558 N78-31048
KLOHK, P.
Simulation tests of anti-flak profiles
p0290 A78-31951
KLOS, L. C.
An interface management approach to software development
p0535 A78-49933
KLOPAN, R. M.
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088
KLUG, H.-G.
Basic considerations concerning the possibilities of wing families in civil aviation
[DGLR PAPER 77-029] p0189 A78-24420
KNIGHT, R. C.
S-3A composite spoiler in-service evaluation
p0219 A78-25209
KNIGHT, V. H., JR.
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
KNIVEL, A. IA.
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
KNOTT, J.
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
KNOTT, P. G.
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
KNOTT, P. R.
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
KNOWLES, W. D.
Fire fighter tools
[AD-A051687] p0364 N78-23107
KNOX, C. E.
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
Experimental determination of the navigation error of the 4-D navigation, guidance, and control systems on the NASA B-737 airplane
p0433 N78-26071
KNUDSEN, T.
Uncertainties in airport cost analysis and their effect on site selection
p0089 N78-12104
KNYSH, IU. A.
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
KOBAYAKAWA, M.
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
An experiment on the gust response of a transport airplane by free-flight model
p0474 A78-44835
KOBAYASHI, H.
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
KOBAYASHI, T.
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
KOCH, C. C.
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
KOCK, B. M.
Overview of the NASA YF-12 program
p0605 N78-32056
KODAMA, H.
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058
KODAMA, Y.
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
KODRES, U. R.
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
KOEGLER, J. C.
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
KOEHLER, F.
Semi-analytical calculation of temperature transients in jointed structures
p0001 A78-10315
KOEHLER, H.
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
KOEHLER, H.
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
KOENIG, E. W.
Fabrication and test of digital output interface devices for gas turbine electronic controls
[NASA-CR-135427] p0455 N78-27129
KOENIG, S. E.
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
KOENKE, E. J.
A single site passive collision avoidance system
p0111 A78-17912
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
KOERNER, H.
Modern concepts for aerodynamic rotor design
[DLR-IB-151-77/11] p0243 N78-18058
KOESTER, H.
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
KOETEEUW, R. I.
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
KOFF, B. L.
Aircraft engine design - Development through lessons learned
p0335 A78-34641
Aircraft engine design and development through lessons learned
p0419 A78-41507
KOPSKEY, M. G.
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at

temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14998
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053

KOGAN, M. N.
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
Self-focusing of a Gaussian beam in a supersonic gas flow
p0585 A78-51387

KOHLMAN, D. L.
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055

KOHN, S. D.
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170

KOISO, A.
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266

KOJIMA, J.
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043

KOKIN, A. S.
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798

KOKUNKO, V. S.
Antenna fairings for flight vehicles /2nd revised and enlarged edition/
p0598 A78-53426

KOLB, W.
A study of the economic impact of selected communications alternatives, present system definition
[AD-A052162] p0365 N78-23285

KOLCUM, E. H.
New production methods gain
p0598 A78-53239

KOLESNIKOV, A. V.
Turbulent boundary layer on a moving surface
p0163 A78-20850

KOLESNIKOV, G. M.
Operator work capacity during parachutist free-fall
p0517 A78-47978

KOLET, S. A.
The AFIT remotely piloted vehicle
p0050 A78-13450

KOLEYNI, G.
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080

KOLLOKOWSKI, G.
Comparison of estimated and flight data for rolling take-off and transition of a VTOL aircraft
p0435 N78-26083

KOLTON, G. A.
Three-dimensional hypersonic gas flow past a thin wing
p0474 A78-44850
Unsteady hypersonic gas flow past a thin wing of finite span
p0529 A78-49792

KOMAROV, A. A.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606

KOMAROV, A. I.
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736

KOMAROVSKII, L. V.
Axisymmetric unsteady flow past obstacles in a cylindrical tube
p0586 A78-51441

KOMEYA, K.
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630

KOMISSAROVA, T. M.
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322

KOMLEV, A. P.
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184

KOMCSEK, J. L.
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099

KONDO, S.
Psychological Assessment of Aircraft Noise Index
p0291 A78-32058

KONDO, Y.
The development of a regenerator seal for vehicular use
p0574 A78-50587

KONDRASHOV, G. M.
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893

KONDRATEV, V. F.
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266

KONONENKO, V. G.
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
Investigation of the quality of airframe force-structures and optimal technical decisions during production planning
p0132 A78-20291

KONOP, P. L.
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591

KONOPLIANNIKOV, E. G.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267

KONSEWICZ, R. K.
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112

KOOB, S. J.
Relating take off gross weight and mission requirements for geometrically optimized aircraft
[AIAA PAPER 78-98] p0158 A78-20684

KOPPELMAN, R.
Multiprocessing for electronic warfare avionics
p0532 A78-49869

KORCHAGINA, I. V.
Heat-resistant equipment for bending shaped material with electrical heating
[AD-A045909] p0145 N78-14411

KORDULLA, W.
Displacement thickness distributions in transonic flows about 3-D wings
p0108 A78-17612

KORKAN, K. D.
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089

KORN, D.
Supercritical wing sections III
p0341 A78-35728

KORN, D. G.
Supercritical cascade design
p0012 A78-12302
KORNEV, V. M.
Density of motions in the flutter of infinite plates
p0594 A78-52932
KORNIENKO, E. E.
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
KORNILOV, V. I.
Interaction of turbulent boundary layers in a right-angle corner
p0588 A78-51697
KORNILOVICH, V. B.
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
KOROLEV, A. S.
Pulse tubes for aerodynamic studies
p0415 A78-40298
KOROLEV, V. I.
Static stability of vehicles which use the lifting force of airfoils
[AD-A049069] p0255 N78-19074
KOROVSKII, SH. IA.
Metals in flight /2nd enlarged and revised edition/
p0415 A78-40375
KORRELL, P.
On the compensation of radio direction finders
p0379 A78-38247
KORYCINSKI, P. P.
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
KOSHINUMA, M.
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
KOSHINUMA, T.
Research and development of digital jet-engine controls
p0578 A78-50626
KOSORYGIN, V. S.
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
KOSOWSKY, L. H.
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
KOSTIA, T.
Analysis of aviation accidents with light planes and helicopters
p0053 A78-14084
KOSTIN, L. C.
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
KOSTINA, G. N.
Formation of residual stresses in the thermal strengthening of gas-turbine engine components
p0426 A78-42740
KOSYKH, A. P.
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
KOTAKE, S.
Noise from separated flow of flat plate
p0577 A78-50622
KOTANSKY, D. R.
The influence of V/STOL vehicle configuration variables on vectored jet induced flow fields in ground effect
[AIAA PAPER 78-1021] p0465 A78-43555
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
KOTELNIKOV, G. N.
Distribution of reliability characteristics among aircraft units to ensure a given flight-safety level
p0174 A78-22639
Distribution of reliability characteristics among airplane system units to ensure given flight safety level
p0518 A78-48221
KOTTAPALLI, S. B. R.
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
KOUALSKI, S.
Investigation to support phase 1 of the USAP midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
KOURTIDES, D. A.
AIC/50/ values for some polymeric materials
p0371 A78-36596
The relative fire resistance of select thermoplastic materials
p0480 A78-45475
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0526 A78-49693
Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-2] p0457 N78-27184
KOVAL, IU. I.
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
KOVAL, L. R.
On sound transmission into a heavily-damped cylinder
p0285 A78-31019
KOVAL, V. A.
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
KOVALCHUK, S. V.
Hydromechanical properties of an isolated wing moving above a screen
[AD-A044692] p0091 N78-12379
KOVALENKO, A. A.
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Dynamics of a string accelerometer
p0131 A78-20256
KOVALENKO, N. D.
Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle engines
p0599 A78-53511
KOVALEV, A. A.
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
Operational experience with long-safe-life gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
KOVALEV, A. M.
Observability criteria for nonlinear dynamic systems subjected to multiparameter measurements
p0274 A78-29089
KOVALNOGOV, N. N.
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
KOVASZNAY, L. S. G.
Wake cutting experiments
p0336 A78-34843
KOWALSKI, S. H.
Avionics cost development for alternatives of selected air traffic control systems
[AD-A054823] p0547 N78-30080
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
KOZHEVNIKOV, IU. V.
Analytic construction of part-throttle GTE characteristics
p0049 A78-13170

Analysis of the determination of acceptance-inspection parameters for gas-turbine engines
p0174 A78-22630
Analysis of GTE tolerance monitoring parameter formation
p0517 A78-48212
KOZLOVSKII, V. I.
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis
p0282 A78-30175
KOZLOWSKI, H.
Flight effects on the aerodynamic and acoustic characteristics of inverted profile ccannular nozzles
[NASA-CR-3018] p0621 N78-32836
KRAEMER, J. W.
In-flight alignment/calibration techniques for unaided tactical guidance
p0534 A78-49929
KRAEMER, U.
Advanced quiet propulsion for general aviation
[DGLR PAPER 77-044] p0190 A78-24433
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
KRAFT, D.
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
KRAIKO, A. N.
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
KRAIN, H.
Improvements in the calculation of the centrifugal compressor flow by experimental study of the complex rotor flow
[DGLR PAPER 77-062] p0117 A78-18707
KRAM, W.
Bearing study program
[AD-A049767] p0314 N78-21068
KRAMER, J. J.
Overview of NASA CTOL program
p0446 N78-27047
KRAMER, W. H.
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
KRAUS, E. F.
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
KRAUSCHE, D.
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
KRAUSE, F. H.
Evaluation of a power-augmented-ram wing operating free in heave and pitch over water
[AD-A045428] p0093 N78-13021
KRAUSPE, P.
The endangerment of flight safety due to wind shear
[DGLR PAPER 77-033] p0191 A78-24448
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397
Flight safety hazards by shear winds
[TUBS/SFB58/62] p0359 N78-23073
KRAVCHENKO, B. A.
Formation of residual stresses in the thermal strengthening of gas-turbine engine components
p0426 A78-42740
KRAVETS, A. S.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
KRAVETS, V. V.
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
KREISSELMEIER, G.
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
Control system design using vector-valued performance criteria with application to the control rate reduction in parameter insensitive control systems
[DLR-FB-77-55] p0565 N78-31125
KRENKEL, A. R.
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056
Slender body theory programmed for bodies with arbitrary cross section
[NASA-CR-145383] p0437 N78-26102
KREPLIN, H.-P.
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
KRETSINGER, P. H.
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation
[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044
KREUTZ, F.
Sikorsky YUH-60A UTTAS helicopter flight test program
p0125 A78-19449
KRICH, S. I.
DABS coverage
[AD-A045940] p0139 N78-14022
KRIKUNOV, V. V.
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
KRINITSYN, V. V.
Aircraft radar systems
p0377 A78-37873
KRISHNAN, R.
On the application of dual-phase damping to landing gears
p0123 A78-19405
KRIUKOVA, S. G.
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
KRIVOLAPOV, G. D.
Prospects for using new flight vehicles in aerophysical studies
p0386 A78-39189
KROC, R.
Condition monitoring experience on CF6 engines
[SAE PAPER 770994] p0180 A78-23830
KROEGER, R. A.
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109
KROEKER, B.
Lateral-aerodynamic characteristics of highly-dihedraled wings
p0523 A78-49334
KRONENBERGER, L., JR.
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392
KRONOGARD, S. O.
Advantages of 3-shaft KTT gas turbine configurations for automotive applications
p0575 A78-50602
KROTKY, J.
Properties of fuels used in the Czechoslovak aircraft industry
p0277 A78-29588
KRUPINSKI, E. C.
Safety and communication requirements in air traffic control today
p0594 A78-52956
KRUPP, W.
Application of fracture mechanics data to aerospace design
p0050 A78-13414
KRUSE, G. S.
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft

p0109 A78-17891
KRUSE, H.
Investigation on temperature distribution near film cooled airfoils
p0320 N78-21127
KRUSE, R. L.
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
KRUSZEWSKI, E. T.
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
KRUTOV, V. I.
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
KRYLOV, I. F.
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
KRYLOV, Y. V.
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673
KRYZHANOVSKII, G. A.
Optimization techniques for air traffic control problems
p0522 A78-48504
KUBBAT, W. J.
A multifunctional guidance and control system
p0064 A78-15640
Design and development of a multifunctional helicopter control system
p0524 A78-49396
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
Advanced control concepts for future fighter aircraft
p0549 N78-30104
KUBLIN, IU. A.
Taking into account the effect of elasticity of the structure on the longitudinal short-period motion of an aircraft
p0164 A78-20882
KUBO, T.
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
KUCHEROV, A. N.
Self-focusing of a Gaussian beam in a supersonic gas flow
p0585 A78-51387
KUDELSKI, R.
MSP/ITWL airborne measuring system
p0231 A78-28196
KUEHL, W.
Investigations of the local heat transfer coefficient of a convection cooled rotor blade
p0319 N78-21126
KUHL, A. E.
Strain gage calibration of a complex wing
p0071 A78-16182
Recent load calibrations experience with the YF-12 airplane
p0605 N78-32057
KUHLMAN, J. M.
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
KUHLTHAU, A. R.
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
KUHN, J.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
KUHN, P. M.
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
KUHN, T. E.
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
KUIPERS, J.
Twoway - A position and orientation measurement system
p0525 A78-49661
KUKES, I. S.
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107
KUKLEV, L. P.
Two-channel method of processing interval codes
p0429 A78-43085
KULCHENKO, G. G.
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
KULESHOV, V. A.
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
KULFAN, R. M.
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
Application of hypersonic favorable aerodynamic interference concepts to supersonic aircraft
[AIAA PAPER 78-1458] p0591 A78-52042
Application of laminar flow control to large subsonic military transport airplanes
[AD-A052422] p0394 N78-24098
KULHAVY, R. W.
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045
KULIEV, V. D.
Fatigue crack growth in a pressure-fuselage panel
p0174 A78-22649
Fatigue crack growth in pressurized fuselage panel
p0518 A78-48231
KULIKOV, A. N.
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
KULIKOV, E. I.
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
KULLAB, I.
Small perturbation expansions in unsteady aerofoil theory
p0074 A78-16401
KULWICKI, P. V.
High acceleration cockpit simulator evaluation
[AD-A045165] p0100 N78-13081
KUMARI, M.
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503
KUMIROV, B. A.
A theoretical and experimental analysis of the influence of coolant discharge from perforated turbine blades on their aerodynamic behavior
p0580 A78-50777
KUNACHOWICZ, K.
Filtering techniques in avionic transmitters
p0384 A78-39084
KUNCIW, B. G.
Optimal flare in presence of wind shears
p0385 A78-39186
KUNKEL, B. A.
A modern warm fog dispersal system
p0056 A78-14994
KUNZ, K. S.
A three-dimensional finite-difference solution of

the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124

KUPERMAN, M. M.
Today's non-metallic composite airframe structure An airline assessment
p0218 A78-25196

KUPRIIANOV, I. I.
Communication and navigation antennas for aircraft
p0522 A78-48523

KUPTSOV, V. M.
Influence of the jet temperature on the characteristics of a gas-jet sound generator
p0331 A78-33568

KURAEVA, V. P.
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324

KURANISI, M.
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266

KURKOWSKI, R. L.
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560

KURMANOV, B. I.
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435

KUROSAKA, M.
Unsteady blade rows in high-speed flow
[AD-A055620] p0615 N78-32391

KUROUMARU, M.
Calculation of cascade flow by means of spline fit singularity
p0576 A78-50606
Development of velocity profile through a stage of axial flow turbomachinery
p0576 A78-50609

KURTSEVA, I. I.
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273

KURZHALS, P. R.
Integrity in flight control systems
p0182 A78-23873

KUSENBERGER, F. N.
Critical inspection of bearings for life extension
p0444 N78-26472

KUSHEVERSKII, S. K.
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918

KUTINOV, V. P.
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918

KUTNEY, J. T.
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068

KUTUZA, B. G.
Aircraft measurements of the spatial fluctuation characteristics of atmospheric radio emission at wavelengths of 0.8 and 1.35 cm
p0229 A78-27721

KUZENKO, A. M.
Investigation of the convergence of a method of computing the flow around cascades in a variable thickness layer
p0588 A78-51687

KUZMIN, N. A.
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455

KUZMINA, S. I.
Calculation of the flow past a vibrating airfoil section in transonic gas flow
p0127 A78-19669

KUZNETSOV, N. D.
Aspects of the thermal fatigue strength of gas-turbine engine components
p0523 A78-49176

KUZNETSOV, V. N.
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893

KVATERNIK, R. G.
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002

L

LA VERGNE, R. L.
A Flight Line Computer Loader/Test Controller for improved avionic maintenance
p0068 A78-15701

LABARGE, W. L.
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084

LABERGE, E. F. C.
Comparison study of MLS airborne signal processing techniques
p0533 A78-49904

LABROJERE, T. E.
Airfoil design by the method of singularities via parametric optimization of geometrically constrained least squares object function
[NLR-TR-76139-U] p0491 N78-28087

LACEY, T. R.
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
MIL-F-83300; view from an aircraft designer
p0258 N78-19101

LACKEY, J. A.
Military transport (C-141) fly-by-wire program
[AD-A046163] p0143 N78-14056

LACKEY, W. W.
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065

LACROIX, D.
French procedures for airfield pavement load evaluation
p0526 A78-49679

LAFFERMAN, F. L.
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284

LAFONTAINE, B.
The Concorde and cosmic rays
p0225 A78-26739

LAGARDE, X.
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074

LAGOSIUK, G. S.
The An-26 aircraft: Construction and use
p0283 A78-30273

LAHEY, R. S.
Substructure coupling: A different approach
p0091 N78-12455

LAITONE, E. V.
Effect of a nonconstant C/m-alpha/ on the stability of rolling aircraft
p0071 A78-16180
Ideal tail load for minimum aircraft drag
p0231 A78-28149

LAKSHMINARAYANA, B.
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995

LALLY, V. E.
The use of long-duration balloons for scientific research
p0113 A78-18184

LAMAB, J. E.
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Strake-wing analysis and design
[AIAA PAPER 78-1201] p0423 A78-41891
LAMB, F. D.
Avionics maintenance study
[AD-A042568] p0017 N78-10003
LAMB, M.
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
LAMBELL, A. J.
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
LAMBERT, M.
Black Hawk, Lamps and AAH
p0225 A78-26533
LAMBIOTTE, J. J., JR.
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050
LAMBOURNE, N. C.
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
LAMEKIN, N. S.
Influence of the bypass ratio on jet-engine weight
p0581 A78-50787
LAMPARD, G. W. N.
The effect of thrust vectoring and attitude control concepts on the propulsion system of V/STOL aircraft
[AIAA PAPER 78-1020] p0520 A78-48481
LAMSON, R. T.
The development of the first pressurized sailplane
p0075 A78-16598
LAN, C. E.
Minimum induced drag configurations with jet interaction
[NASA-CR-145344] p0204 N78-17002
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059
A theoretical investigation of ground effects on USB configurations
[NASA-CR-157355] p0499 N78-29086
LANCASTER, J. R.
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374
LANDER, H. R.
Future aviation turbine fuels
[AIAA PAPER 78-268] p0162 A78-20781
LANDER, J. A.
Engine/airframe matching considerations for subsonic V/STOL aircraft
[AIAA PAPER 78-922] p0461 A78-43501
LANDGRAF, R. C.
A flight qualified graphics generator
p0539 A78-50007
LANDSTRASS, M.
Exploratory development of conductive coating materials
[AD-A048253] p0247 N78-18138
LANDY, M. A.
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
LANDY, R. J.
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
LANE, J. P.
YC-15 development and test highlights - Phase III
p0233 A78-28457
LANE, B.
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
LANE, R. E.
Flight controls of Army/Hughes YAH-64 advanced attack helicopter
[AIAA 78-1237] p0540 A78-50160
LANG, J. D.
A technique for vorticity measurement in unsteady flow
[AIAA 78-801] p0295 A78-32356
LANG, L. E.
F-15 avionics Built-in-Test
p0539 A78-49991
LANGDON, S. D.
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
LANGE, G.
Case of damage involving aircraft and helicopter components of light metal
p0371 A78-36941
LANGE, H.-H.
The HFB 320 airborne simulator of DFVLR as test instrument for determining flight characteristics
[DGLR PAPER 77-082] p0289 A78-31944
LANGER, H. J.
DFVLR rotorcraft research
p0263 N78-19146
LANGFORD, C. B.
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
LANGHAM, T. F.
Correlation of experimental and theoretical steady-state spinning motion for a current fighter airplane using rotation-balance aerodynamic data
[AIAA 78-1373] p0485 A78-46561
LANGLEY, W. W.
Automatic flightpath calculation and position reporting using a single VOR receiver and a microprocessor system
p0107 A78-17598
LANGTON, R.
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
LANIUK, A. N.
The effect of two-dimensionality of the flow of a gas with stepwise distribution of total parameters on the integral characteristics of a Laval nozzle
p0429 A78-43116
LANNING, J. G.
Aluminous keatite - A durable ceramic material for rotary regenerator cores
p0574 A78-50588
LANSING, W.
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
LANZ, M.
A program for the interactive design of wing structures
p0120 A78-19063
LAPLANE, R.
The Concorde and cosmic rays
p0225 A78-26739
LAPORTE, R.
Construction of airfoil profiles approximating a given profile
p0485 A78-46588
LAPTEV, Y. I.
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
LAPYGIN, V. I.
Normal force of a flat triangular wing in a supersonic flow
p0278 A78-29720
LARGE, J. P.
A critique of aircraft airframe cost models
[AD-A047181] p0198 N78-16048

Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100
LARSON, R.
Autothreshold autoscreener/FLIR system
p0538 A78-49984
LARSON, R. S.
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058
LARSON, V. J.
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1138] p0476 A78-45138
LARUSSA, J. A.
Optical simulator with a holographic component
[AIAA 78-1581] p0579 A78-50671
LASCHKA, B.
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Airframe response to separated flow
p0438 N78-26116
LASKARIS, T. E.
Finite-element analysis of three-dimensional potential flow in turbomachines
p0416 A78-40831
LASKIN, A. S.
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266
LASZEWSKI, M. M.
LACV-30 test and demonstration report
[AD-A053610] p0492 N78-28276
LATHAM, D.
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
LATTERMAN, D.
C-141A service experience - Materials and processes
p0219 A78-25207
LATYPOV, F. F.
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
LAU, J. C.
Mach number and temperature effects on jets
[AIAA PAPER 78-1152] p0476 A78-45134
LAURENSON, R. M.
Flutter of control surfaces with structural nonlinearities
[AD-A045221] p0099 N78-13073
LAUTNER, D. E.
Electrical load management for advanced aircraft electrical systems
p0062 A78-15575
LAVERNHE, J.
The Concorde and cosmic rays
p0225 A78-26739
LAVERTY, W. F.
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
LAVROKHIN, G. N.
External drag and base pressure of fuselage tail sections of various configuration
p0128 A78-19683
LAW, C. C.
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
LAWACZECK, O.
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
LAWING, P. L.
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
Configuration heating for a hypersonic research airplane concept having a 70 deg swept double-delta wing
[NASA-TP-1143] p0366 N78-23389
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
LAWLEY, M. W.
Instrumentation and control for a large engine test facility
p0107 A78-17584
LAWNCZECK, O.
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data
p0322 N78-21148
LAYTON, D. M.
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
LAZARICK, R. T.
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
LAZZERETTI, R.
A method for determining the stability characteristics of aircraft in a helicoid flight path
p0527 A78-49741
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
LE BALLEUR, J.-C.
Viscous-inviscid coupling - A numerical method and applications to two-dimensional transonic and supersonic flows
[ONERA, TP NO. 1978-55] p0380 A78-38698
LEAKE, R. J.
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Alternatives for jet engine control
[NASA-CR-157578] p0563 N78-31107
LEATHERBURY, C. H.
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
LEAVER, E. C.
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043
LEAVITT, J.
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
LEAVITT, L. D.
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
LEBACQZ, J. V.
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
An investigation of potential control-display configurations for V/STOL aircraft
[AIAA 78-1238] p0540 A78-50161
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
LEBEDEV, N. A.
Natural vibrations of a rigid rotor mounted on

elastic ball bearings
p0582 A78-51015
LEBEDEV, V. P.
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
LEBOT, Y.
Measuring techniques in high temperature turbines
p0322 N78-21151
LECCE, L.
Wind tunnel experiments on a NACA 632-A215 wing profile with boundary layer control through blowing on the leading edge
p0121 A78-19075
Use of ground vibration test equipment to determine unsteady aerodynamic forces
p0526 A78-49708
LECHT, M.
Aerodynamic behavior of an axial-flow compressor in the presence of inflow disturbances
[DGLR PAPER 77-064] p0116 A78-18706
LECKMAN, P.
The role of the computer in the flight testing of general aviation aircraft
[AIAA PAPER 78-1465] p0512 A78-47914
LECOMPTE, R. E.
Downed Airman Power Source (DAPS) for inclusion into the BSSK-8A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044483] p0083 N78-12052
Downed Airman Power Source (DAPS) for inclusion into the BSSK-1A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044481] p0083 N78-12053
LECOMTE, P.
Adaptation for economization, or adaptation for the economization of energy
p0003 A78-12030
LEDBETTER, J. O.
Aircraft vortex effects on ground level pollutant concentration
[APCA PAPER 77-41,5] p0220 A78-25384
Remote sensing of aircraft wake vortex movement in the airport environment
[APCA PAPER 77-41,4] p0220 A78-25385
LEDOUX, M.
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
LEE, A.
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Comparison of measured and calculated helicopter rotor impulsive noise
[NASA-TM-78473] p0311 N78-20917
Acoustical effects of blade tip shape changes on a full scale helicopter rotor in a wind tunnel
[NASA-CR-152082] p0311 N78-20918
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
A study of the noise radiation from four helicopter rotor blades
p0621 N78-32835
LEE, B. L.
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053
LEE, C. D.
Computer simulation of terminal utilization
p0469 A78-44225
LEE, C. P.
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371
LEE, D.
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
LEE, D. S.
Brake-plates for aeroplanes
[AD-A045932] p0143 N78-14150
LEE, H.
Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072
LEE, H. C.
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
LEE, H. Q.
Optimum horizontal guidance techniques for aircraft
p0356 N78-23016
LEE, J. D.
Testing techniques and interference evaluation in the OSU transonic airfoil facility
[AIAA PAPER 78-1118] p0420 A78-41828
LEE, J. G.
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055
LEE, K. S. H.
EMP response of aircraft antennas
p0169 A78-21992
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
LEE, K.-M.
A three-dimensional finite-difference solution of the external response of an aircraft to a complex transient EM environment. I - The method and its implementation. II - Comparison of predictions and measurements
p0372 A78-37124
LEE, R.
OCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
LEE, R. A.
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
LEE, R. E.
Ultra high power transformers for airborne applications
p0063 A78-15625
Further experimental evaluation of the electrostatic roll sensor at Mach 2.3 and 3.5
[AIAA 78-802] p0296 A78-32357
LEE, R. Q.
The digital airplane
p0126 A78-19547
LEE, W. H.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
LEE, W. N.
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122
LEE, W. O.
F-16's ISAs reduce cost, weight, and leakage
p0108 A78-17737
LEEMAN, E. R.
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095
LEFEBVRE, A. H.
Combustion performance of gas turbine combustors burning alternative fuels
[AIAA PAPER 78-1000] p0465 A78-43547
Ignition of liquid fuel sprays at subatmospheric pressures
p0470 A78-44268
LEFEVRE, G.
Applications of new visualization techniques to on-board equipment
p0343 A78-35974
LEFEVRE, J.
Laser velocimeter for wind tunnel measurements
p0378 A78-37979

Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
LEGENDRE, R.
Noise of aerodynamic and, in particular, turbojet origin
[ONERA, TP NO. 1977-161] p0075 A78-16618
Remarks on the noise emitted by the jet of a gas turbine engine
[ONERA, TP NO. 1978-53] p0380 A78-38696
LEGRIVES, E.
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
LEHMAN, J. M.
Simulation and analysis of wind shear hazard
[NASA-CR-157470] p0504 N78-29699
LEHTHAUS, F.
Calculation of transonic flow through a turbine cascade by the time-step method
p0379 A78-38248
LEHTINEN, B.
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024
LEIKACH, K. I.
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
LEIMBACH, G. R.
Design and evaluation of a side force generator modification for the XBQM-1 remotely piloted vehicle
[AD-A048901] p0260 N78-19122
LELIUSHENKO, S. I.
Determination of the longitudinal lines of an aircraft fuselage by the special-contour method
p0174 A78-22640
Definition of airplane fuselage longitudinal lines by the special contour method
p0518 A78-48222
LEMMERMAN, L. A.
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
LEMNIOS, A. Z.
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085
LENA, P.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
LENERTZ, J. E.
Account of mainstream turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 77-HT-10] p0106 A78-17483
LENNARD, D. J.
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
CF6 performance improvement
p0447 N78-27051
LENOBT, F.
Tentative establishment of a mathematical model of a turbojet engine as a controlled system
p0229 A78-27567
LENSKI, J. W., JR.
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
LENZEN, K. H.
Structural analysis of ultra-high speed aircraft structural components
[NASA-CR-155334] p0101 N78-13476
LEONARD, J. T.
Electrostatic charging of JP-4 fuel on polyurethane foams
[AD-A053831] p0457 N78-27278
LEONARD, K. C., JR.
Life cycle costing, a design tool - Nuances and caveats
p0060 A78-15554
Modular Missionization Systems /MMS/, an adaptive system interface concept
p0530 A78-49852
LEONARD, R. W.
Airframes and aerodynamics
p0461 A78-43359
LEONDES, C. T.
Evaluation of geometric performance of global positioning system
p0378 A78-37987
LEONG, P. J.
Dynamic analysis of electrical systems
p0535 A78-49934
LEONG, R. K.
The energy costs of some noise abatement procedures
p0288 A78-31313
LEONOVA, O. V.
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
LERAT, J.
Flight and wind tunnel measurements on the leading edge of a Nord-2501 wing
[ONERA, TP NO. 1978-44] p0342 A78-35894
LERNER, E.
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
LESHANE, A. A.
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
LETTOW, K.
Civil components program "Wing Section'. Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
LEUTIN, P. G.
Pressure distribution over sharp-nosed cones situated at angles of attack from 0 to 10 degrees in supersonic flow
p0165 A78-20889
LEVE, H. L.
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
LEVINE, S. R.
Reaction diffusion in the NiCrAl and CoCrAl systems
p0597 A78-53063
LEVINSEN, M.
Bearing study program
[AD-A049767] p0314 N78-21068
LEVINSKY, E. S.
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
LEVINSON, E.
Laser-gyro strapdown inertial system applications
p0439 N78-26130
LEVISON, W. H.
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
LEVY, H.
US Navy examining a wide range of V/STOL concepts
p0274 A78-29175
LEVY, L. L., JR.
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
LEWIS, D. A.
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
LEWIS, G. W., JR.
Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107
LEWIS, R. B.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874

LEWIS, R. E.
Correlation of microstructure with fracture toughness properties in metals, part 3
[AD-A043741] p0045 N78-11238
LEWIS, R. J.
CF6 jet engine performance deterioration results
p0446 N78-27049
LEWIS, T. D.
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
LEWIS, W.
Vertical fog classifications and slant/runway visual range ratios
p0056 A78-14997
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet
[AD-A052870] p0452 N78-27103
LEWITOWICZ, J.
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648
LEZBERG, E. A.
Global atmospheric sampling program
p0040 N78-11076
LI, P.-Z.
Pressure dependence of turbulent jet noise
p0470 A78-44357
LIAUGMINAS, R.
Technical evaluation report on the Fluid Dynamics Panel Symposium on Prediction of Aerodynamic Loading
[AGARD-AR-125] p0608 N78-32074
LICHTENSTEIN, J. H.
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
LICKLEDERER, A.
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-76/3] p0137 N78-14002
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-77/1] p0238 N78-18012
LIESE, H.
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
LIEURANCE, N. A.
Aviation weather service requirements, 1980 - 1990
p0267 N78-19713
LIFSHITS, IU. B.
Transonic flows past a lift profile
p0274 A78-28961
LIKHTER, V. A.
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
LILLEY, D. G.
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
LILLY, D. K.
A severe downslope windstorm and aircraft turbulence event induced by a mountain wave
p0188 A78-24356
LIMAGE, C. R.
Development of low pressure ratio vectoring nozzles for V/STOL aircraft
[SAE PAPER 770988] p0180 A78-23825
Evaluation of inlet reingestion for large bypass ratio V/STOL aircraft
[AIAA PAPER 78-1079] p0521 A78-48495
LIMANSKII, A. V.
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
LIMBACH, P.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
LIN, P.-B.
Airport choice in low demand region
p0229 A78-27547
LIN, Y. K.
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
LINCOLN, N. R.
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
LINDBECK, R. K.
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
LINDOW, B. G.
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283
LINDSEY, G. H.
Report on aircraft fatigue studies
[AD-A049876] p0317 N78-21102
LINDSEY, T. H.
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
LINGAIAH, K.
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
LINGEN, A.
Compressor blade manufacture by electrochemical machining. Advanced turbine engine gas generator
[AD-A043742] p0030 N78-10110
LINN, R. J.
'Supermarket' airplanes
[AIAA PAPER 78-1533] p0527 A78-49769
LIONBERGER, S. R.
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146
LIOU, M. S.
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
LIPCSEY, M. J.
AWLS operational flight test
[AD-A043814] p0037 N78-11050
LIPELES, R.
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
LIPIN, A. V.
Choice of optimal ellipsoid-surface projection onto a sphere in solving problems of air navigation
p0273 A78-28523
LIPIN, E. K.
Design of load-bearing structures of maximal rigidity
p0129 A78-19707
Taking structural and technological constraints into account in the design of maximum-stiffness load-bearing structures
p0164 A78-20880
Determination of the stress-strain state in the end region of a stress-raiser rib
p0165 A78-20917
LIPKE, D. W.
Maritime satellite communications - Where we are and where we're going
[AAS 77-257] p0371 A78-36721
LIPNITSKII, IU. M.
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
LIPOVOI, G. S.
Application of the integral-transformation method to three-dimensional unsteady problems of the theory of cascades
p0370 A78-36366
Factorization methods in hydroaeromechanics
p0378 A78-37887
LIPP, L. C.
Halogenated solvent-induced corrosion in hydraulic systems
[ASLE PREPRINT 78-AM-4A-2] p0378 A78-38083
LISLE, T. K.
The F-16 sampled data assembly
p0063 A78-15618

LISSAMAN, P. B. S.
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
LISTER, E.
Getting ready for V/STOL T&E in the 80's
p0123 A78-19431
LISZKA, L.
Long-distance focusing of Concorde sonic boom
p0517 A78-48052
LITTLE, L.
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879
LITWINCZYK, M.
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
LIU, D. D.
A lifting surface theory based on an unsteady linearized transonic flow model
[AIAA 78-501] p0280 A78-29820
LIU, T. K.
EMP response of aircraft antennas
p0169 A78-21992
LIUTERMOZA, J. F.
Some formulation considerations in 3D transonic flow computation
p0010 A78-12291
Second order accurate calculation of transonic flow over turbomachinery cascades
[AIAA PAPER 78-1149] p0421 A78-41849
LLORET, P.
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
LLOYD-JONES, D. J.
The next commercial transport aircraft - What, when, why: The American Airlines view
p0057 A78-15085
Planning for the next generation aircraft - An airline view
[AIAA PAPER 78-361] p0186 A78-24033
LLOYD, W. B.
Vibration control of optical packages in aircraft
p0063 A78-15594
LO, C. F.
Tunnel interference assessment by boundary measurements
p0284 A78-30689
LOBANOV, N.
From space on a parachute
[NASA-TM-75577] p0631 N78-33140
LOCK, R. C.
The prediction of viscous effects on aerofoils in transonic flow
p0478 A78-45237
LOCKERD, R. M.
Implementation of the discrete address beacon system /DABS/ sensor
p0064 A78-15634
LOCKHART, L. B., JR.
High performance composites and adhesives for V/STOL aircraft
[AD-A054637] p0503 N78-29154
LOCKWOOD, V. E.
Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
LOEBERT, G.
Wing with fork tips as means of increasing cost effectiveness of transport aircraft
[DGLR PAPER 77-017] p0189 A78-24410
LOEFFLER, A. L., JR.
Inviscid flow through wide-angle diffuser with actuator disk
p0597 A78-53095
LOEFFLER, I. J.
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
LOEBKE, J.
An extended vortex-lattice-method for the application on subsonic/transonic transport aircraft configurations
[DGLR PAPER 78-071] p0478 A78-45238
LOEWENTHAL, S. H.
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
LOGAN, A. H.
Evaluation of a circulation control tail boom for yaw control
[AD-A055116] p0564 N78-31119
LOGAN, D. R.
Vibration control of optical packages in aircraft
p0063 A78-15594
LOGAN, E., JR.
Preliminary comparison of model and prototype wakes
[AIAA PAPER 78-254] p0162 A78-20774
LOHR, A. D.
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
LOISELLE, J. W.
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
LOKAI, V. I.
Steady-state bulk temperature field in cooled turbine blades
p0187 A78-24156
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
A computer-aided method of calculating temperature fields in turbine disks
p0581 A78-50796
LOKER, A.
Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings
[AD-A053834] p0455 N78-27133
LOKTEV, B. E.
Nonlinear mathematical modeling of unsteady flow past a lifting propeller
p0585 A78-51379
LOMAKIN, L. A.
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
LOMBARDO, S.
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135
LONCHINSKII, B.
Correlation of the errors of the Omega radio navigation system
p0475 A78-45118
LONG, M. E.
Performance monitor and data acquisition system for real-time embedded computers
p0064 A78-15636
A Flight Line Computer Loader/Test Controller for improved avionic maintenance
p0068 A78-15701
LONG, W. C.
Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] p0402 N78-24515
LONGENBAKER, W. E.
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
LONGLEY, T. J. R.
An integrated system of control for hovercraft using differentially acting 'elevons'
p0333 A78-34012
LONGSTREET, C. S.
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
LONGWELL, J. P.
Alternative hydrocarbon fuels for aviation
p0060 A78-15400
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229

Jet aircraft hydrocarbon fuels technology
[NASA-CP-2033] p0266 N78-19325
LONTAI, L. M.
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
LOPATIN, V. E.
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
LOPATKA, R. S.
CAD/CAM data management needs, requirements and options
p0635 N78-33778
LORD, C. J.
Looking offshore at the airport future
p0282 A78-30245
LORENZ, G. E.
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
LORENZ, S. A.
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
LORENZ, W.
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
LORENZINI, D. A.
Navstar GPS field test results
p0530 A78-49856
LORES, M. E.
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
LORTZ, D.
Ballooning stability boundaries for the large-aspect-ratio tokamak
p0599 A78-53664
LOSITO, V.
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
The closed spline functions
p0415 A78-40493
LOTZ, M.
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
Analysis of error sources in predicted flight performance
p0435 N78-26087
LOTZE, A.
Asymmetric store flutter
p0566 N78-31127
LOUET, J.
Aerosat communication management
p0365 N78-23307
LOUIS, J. F.
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
LOUTHAN, J. D.
Impact of engine cycle parameters on V/STOL Type A configuration and commonality
[SAE PAPER 770980] p0179 A78-23821
LOVAT, G.
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
LOVE, R. A.
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
LOVELL, D. T.
Structural material trends in commercial aircraft
[AIAA PAPER 78-1552] p0482 A78-46515
LOVELL, W. A.
ENGINEL: A single rotor turbojet engine cycle match performance program
[NASA-CR-145267] p0087 N78-12089
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
LOVENDAHL, D. E.
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
LOW, J. K. C.
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
LOWAK, H.
Application to life prediction of design data derived from fatigue tests with service-like load sequences
[RAE-LIB-TRANS-1939] p0356 N78-22388
LOWE, J. R.
Improving the accuracy of HUD approaches in windshear with a new control law
[AIAA PAPER 78-1494] p0515 A78-47935
LOWELL, C. E.
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
LOWELL, N.
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
LOWENFELD, A. F.
The future determines the past - Bermuda I in the light of Bermuda II
p0223 A78-26470
LOWMAN, L. D., JR.
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
LOWN, H.
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
LOWREY, D. L.
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
LOWSON, M. V.
Research Requirements for the improvement of helicopter operations
p0263 N78-19147
LOYD, M. S.
Low-cost composite primary structure
p0069 A78-15855
LUCARELLI, G.
The evaluation of the operational characteristics of navigation systems
p0070 A78-15918
LUCAS, E. J.
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
LUCAS, J. G.
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Acoustic evaluation of a novel swept-rotor fan
[NASA-TM-78878] p0403 N78-24897
LUCCHI, G. A.
Color displays for airborne weather radar
p0372 A78-36980
LUCHINI, J. B.
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
LUCIER, E.
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
LUCKRING, J. M.
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Theoretical and experimental analysis of longitudinal and lateral aerodynamic characteristics of skewed wings at subsonic speeds to high angles of attack
[NASA-TN-D-8512] p0093 N78-13015

Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
LUDLOFF, A.
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
LUDWIG, G. R.
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
LUDWIG, L. P.
Gas path sealing in turbine engines
p0330 A78-33218
Self-acting shaft seals
p0331 A78-33219
Design considerations in mechanical face seals for improved performance. 1: Basic configurations
[NASA-TM-73735] p0101 N78-13439
Gas path sealing in turbine engines
[NASA-TM-73890] p0318 N78-21109
Counter pumping debris excluder and separator
[NASA-CASE-LEW-11855-1] p0408 N78-25090
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
LUEHR, L. H.
Dynamic response of lift fans subject to varying backpressure
[AIAA PAPER 78-756] p0292 A78-32176
LUERS, J. K.
Satellite images to aircraft in flight
p0056 A78-14982
LUFT, W.
185 W/kg solar array for naval sea control systems
p0002 A78-10964
LUIDENS, R. W.
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
Inlet technology for powered-lift aircraft
p0392 N78-24069
LUKACHEV, S. V.
Acoustic properties of pneumatic swirl injectors
p0049 A78-13161
LUKACHEV, V. P.
Influence of combustion chamber geometry on toxic compound emissions
p0049 A78-13169
LUKAS, G.
ORLY - A minicomputer-based instrument flight training simulator
p0134 A78-20481
LUM, K.
The NAE airborne V/STOL simulator
p0263 N78-19145
LUNA, G. S.
An investigation into the nature of aircraft supportability in the CILC environment
[AD-A047226] p0193 N78-15991
LUND, J. W.
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
LUNDE, T.
Real-time testing of titanium sheet and extrusion coupon specimens subjected to Mach 2.7 supersonic cruise aircraft wing stresses and temperatures
[NASA-CR-2754] p0101 N78-13478
LUNDGREEN, R. B.
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142
LUNDGREN, S.
Measurement of the pitch damping on two AGARD B models in the FFA S4 and S5 wind tunnels
[FFA-AU-556] p0438 N78-26112
LUSHANOV, V. I.
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
LUTHER, F. M.
The High Altitude Pollution Program
[UCRL-50042-77] p0617 N78-32601
LUU, T.-S.
Method of calculating the compressible flow round an aerofoil or a cascade up to the shockfree transonic range
p0176 A78-23274
LVOV, B. P.
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
LYJAK, R.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
LYKOV, O. P.
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
LYNCH, J. W.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
LYNCH, S. P.
Mechanisms of fatigue and fracture
p0553 N78-30273
LYNN, W.
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators
[AD-A049277] p0257 N78-19089
LYON, C. A.
Quiet propeller/rotor concept evaluation
[AD-A047297] p0197 N78-16047
LYON, T. F.
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066
LYONS, R.
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061

M

MA, D.-Y.
Pressure dependence of turbulent jet noise
p0470 A78-44357
MABEY, D. G.
Prediction of the severity of buffeting
p0249 N78-18382
Prediction of the severity of buffeting
p0493 N78-28404
MABRY, J. E.
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615
MACCALLUM, N. R. L.
Transient expansion of the components of an air seal on a gas turbine disc
[SAE PAPER 770974] p0179 A78-23818
MACCORMACK, R. W.
The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
MACCREADY, P. B.
Flight on 0.33 horsepower - The Gossamer Condor
[AIAA PAPER 78-308] p0184 A78-24009
MACDONALD, I. S.
Commercial aviation future progress, programs, proposals and problems - A prognosis /W. Rupert Turnbull Lecture/
p0112 A78-18034

MACDONALD, T. J.
Comparisons of high anti-jam design techniques for GPS receivers
p0530 A78-49857
MACE, R.
New generation of radio navigation equipment
p0115 A78-18665
MACE, W. D.
Integrated controls for a new aircraft generation
p0231 A78-28219
MACIOCE, L. E.
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
MACIOLEK, J. R.
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
MACISAAC, B. D.
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
Hybrid computer models as an aid in design of gas turbine control systems for helicopters
p0381 A78-38783
MACK, E. A.
Development of a breadboard system for recording ATC displays
p0595 A78-52964
Digitized radar data compressor
[AD-A057442] p0632 N78-33290
MACK, J. C.
HLH drive system
[AD-A054024] p0500 N78-29094
MACK, K. W.
German Army helicopter development and prospects for the future
p0261 N78-19128
MACK, R. J.
Estimation of leading-edge thrust for supersonic wings of arbitrary planform
[NASA-TP-1270] p0623 N78-33051
MACKENZIE, D.
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
MACKENZIE, F. D.
Airport surface traffic control visual ground aids engineering and development plan
[AD-A038153] p0196 N78-16037
MACKIE, D. B.
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113
MACKINNON, M. J.
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Acoustic evaluation of a novel swept-rotor fan
[NASA-TM-78878] p0403 N78-24897
MACKINTOSH, G. B.
Thrust computing system applications to increase engine life and provide fuel conservation
p0287 A78-31311
MACLEOD, I.
Expansion potential for the local service air carrier
p0376 A78-37539
MACPHERSON, P. B.
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DPT-103] p0135 A78-20607
MADDOCK, L.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
MADUELL, C. E.
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
MADY, C. J., JR.
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
MAEDA, H.
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
Gust response of a wing near the ground through the lifting surface theory
p0474 A78-44834
An experiment on the gust response of a transport airplane by free-flight model
p0474 A78-44835
MAEKAWA, S.
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
On some structure-turbulence interaction problems
p0193 N78-15996
MAESTRELLO, L.
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
MAGALA, V. A.
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
MAGENHEIM, B.
Feasibility analysis for a microwave deicer for helicopter rotor blades
[AD-A042581] p0022 N78-10052
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096
MAGLIERI, D. J.
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
MAGNUS, A. E.
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
MAGNUS, R. J.
Calculations of some unsteady transonic flows about the NACA 64A006 and 64A010 airfoils
[AD-A046178] p0137 N78-13999
MAHTANI, J. L.
Linear machine power requirements and system comparisons
p0585 A78-51271
MAIDEN, D. L.
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TM-D-8449] p0081 N78-12037
MAIER, A.
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
MAIER, G. P.
Engineering summary of powerplant icing technical data
[AD-A045087] p0087 N78-12087
MAILLOUX, R. J.
Experimental evaluation of an array technique for zenith to horizon coverage
p0370 A78-36380
MAINE, R. E.
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054
MAINONE, D.
The employment of a dye laser with high peak power and great pulse length for the aircraft-based measurement of 'air velocity'
p0418 A78-41393
MAIOROV, A. I.
Application of a new test method and a new wind-tunnel-data processing technique to the study of unsteady heat conduction processes
p0228 A78-27455

MAISTER, D. H.
The domestic airline industry
p0003 A78-11951
MAKABEWICZ, R.
The location of the ground focus line produced by a supersonic aircraft
p0178 A78-23457
MAKAROVA, N. V.
Observational computation in the case of redundant measurements
p0176 A78-23133
MAKHLIN, I. M.
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
MAKSIMOV, N. A.
Aircraft and helicopter engines - Fundamentals of design and flight operations
p0059 A78-15222
MALASHENKO, L. A.
Designing the elements of a structure of a given guaranteed indestructibility
p0131 A78-20259
MALCOLM, G. N.
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
MALIA, J. F.
Standard modular power supplies for avionics
[AD-A057159] p0627 N78-33100
MALICKA, T.
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297
MALINSKI, E.
New-generation barometric altimeters
p0053 A78-14086
Aircraft separation in the controlled airspace of the United States
p0059 A78-15250
MALITS, P. IA.
Irrotational flow around a spherical segment
p0588 A78-51688
MALKEVICH, M. S.
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
MALLUCK, J. F.
A fail-safe analysis of a spanwise wing-panel splice
[AIAA 78-487] p0279 A78-29794
MALMQUIST, S.
On the detection and measurement of cracks in critically loaded holes
p0444 N78-26469
MALMUTH, N. D.
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
Generalized area rules and integral theorems for hypersonic wing-bodies
p0571 A78-50461
A computational model for three-dimensional incompressible small cross flow wall jets
[AD-A048450] p0237 N78-18008
MALVERN, D.
'New look' in assurance technology - 'The Hornet'
[AIAA PAPER 78-323] p0185 A78-24017
MAMEN, R.
Satellites for position determination
p0601 A78-53911
MANATT, S. A.
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136
MANDEL, E.
The FAA Wind Shear Research and Development Program - A status report
p0134 A78-20480
MANDLE, R. J.
Twenty year evolution of the WR2/WR24 series of small turbojet engines
[SAE PAPER 770998] p0181 A78-23833
MANESS, S. G.
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
MANGANELLO, M. A.
Evaluation of the CVN 68/CVN 69 launching system
[AD-A049044] p0265 N78-19167
MANGANO, F.
Computer simulation of terminal utilization
p0469 A78-44225
MANGANO, G. J.
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105
MANHARDT, P. D.
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
MANIE, F.
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
MANINS, P. C.
Use of NS LX1600A as a short-range altimeter
p0273 A78-28880
MANISON, W. A.
Advancements in ATC information displays and controller-computer interaction
p0596 A78-52975
MANKA, M. J.
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
MANKE, J. A.
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
MANKE, J. W.
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
An improved version of the NASA-Lockheed multielement airfoil analysis computer program
[NASA-CR-145323] p0301 N78-20077
MANN, F. I.
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
MANN, J. Y.
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
MANN, M. J.
Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
MANOR, D.
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
MANTAY, W. R.
Full-scale testing of an Ogee tip rotor
p0620 N78-32830
MANTEGAZZA, P.
Determination of the aerodynamic forces for an aeroelastic analysis of lifting surfaces
p0120 A78-19064
Continuation and direct solution of the flutter equation
p0221 A78-25703
Analysis of semimonocoque beam sections by the displacement method
p0336 A78-34670
MANTY, B. A.
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235
MANZIE, V. S.
Description of transient motion of aviation mechanisms with double-winding electromagnetic clutches
p0220 A78-25584

MAO, Y. T.
Preparing today, to meet the ATC challenges of tomorrow
p0596 A78-52973
MARABI, A.
Analysis of optimal turning maneuvers in the vertical plane
[AIAA 78-1333] p0482 A78-46531
MARAZZI, R.
Numerical study of transonic profiles
p0120 A78-19061
MARBACH, H. W., JR.
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051
MARBLE, F. E.
The interaction of entropy fluctuations with turbine blade rows - A mechanism of turbojet engine noise
p0059 A78-15348
MARCAULT, J.
Automatic airborne spectrometer
[ONERA, TP NO. 1977-176] p0419 A78-41420
MARCHAND, M.
Determination of dynamic characteristics from flight test data
[DLR-FB-77-26] p0141 N78-14044
Determination of dynamic characteristics from flight test data
[ESA-TT-434] p0246 N78-18081
MARCHAND, M. A.
Pitch rate flight control for the F-16 aircraft to improve air-to-air combat
[AD-A055417] p0612 N78-32107
MARCHMAN, J. F., III
Aircraft operating environments around high speed ships
[AIAA PAPER 78-1184] p0422 A78-41877
Whitcomb winglet applications to general aviation aircraft
[AIAA PAPER 78-1478] p0513 A78-47923
The use of the AIAA-Bendix Design Competition in aerospace design courses
[AIAA PAPER 78-1488] p0514 A78-47931
MARCONI, F.
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
MARCUM, D. C., JR.
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
MARCY, W. L.
A rigid airship concept for future naval operations
[AIAA PAPER 77-1195] p0333 A78-34014
MAREK, A. J.
Overview of the advanced aircraft electrical system /AAES/ A-7E prototype design
p0061 A78-15573
MAREK, C. J.
Fuel combustor
[NASA-CASE-LEW-12137-1] p0031 N78-10224
Stratospheric cruise emission reduction program
p0040 N78-11077
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
MARESCA, C.
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
MARESH, R. M.
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
MAREVTSEVA, N. A.
Induction of subsonic wind tunnels with slight perforation
p0519 A78-48250
MARGASON, R. J.
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
MARHEFKA, R. J.
Prospects for commercial commonality in military transports
[AIAA PAPER 78-1467] p0528 A78-49784
MARI, C.
Calculation of the compressible boundary layer around a profile
[AAAF-NT-77-08] p0034 N78-11019
MARIN, L.
EMP response of aircraft antennas
p0169 A78-21992
Broad-band analysis of VLF/LF aircraft wire antennas
p0169 A78-21995
MARJANEK, P.
Measuring noise in aircraft cabins
p0283 A78-30353
MARK, W. D.
Characterization of nonGaussian atmospheric turbulence for prediction of aircraft response statistics
[NASA-CR-2913] p0197 N78-16044
MARKLE, R. L.
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
MARKOV, A. B.
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
A review and application of the equivalent deterministic variable technique: The estimation of a STOL aircraft's response to turbulence
[UTIAS-221] p0353 N78-22112
MARKOWITZ, O.
Reliability, Improvement Warranty (RIW) mid contract evaluation
[AD-A048244] p0250 N78-18441
MARKS, K. E.
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
MARMOL, R. A.
Squeeze film damper characteristics for gas turbine engines
[ASME PAPER 77-DET-23] p0226 A78-26796
MARMON, R. G.
Graphics for the hybrid stores separation simulation of the B77 system
[SAND-78-8212] p0562 N78-31099
MARQUARDT, M. F.
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079
MARQUINA SANCHEZ, L.
A method of calculating ILS approach surfaces
p0275 A78-29207
Noise in airports, its measurement, and its effect on the communities in the vicinity
p0519 A78-48374
MARSCHNER, B. W.
Summary of the 1977 USAF/OSR/ASEE Summer Design Study program on the integration of wind tunnels and computers
[AIAA PAPER 78-1144] p0421 A78-41845
Review of the Air Force summer study program on the integration of wind tunnels and computers
p0270 N78-19804
MARSDEN, D. J.
A potential flow design method for multicomponent airfoil sections
p0115 A78-18637
Wind tunnel tests of a slotted flapped wing section
p0375 A78-37537
MARSH, A. H.
Investigation of ground reflection and impedance from flyover noise measurements
[NASA-CR-145302] p0251 N78-18874
Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements
[AD-A051700] p0403 N78-24899

HABSTERS, G. F.
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor
p0481 A78-46354
The attachment of a ventilated plane jet to an inclined plane wall
p0600 A78-53764
HARTIN, B. D.
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
HARTIN, C. L.
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
HARTIN, D. J.
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004
HARTIN, D. L.
Testing of the YC-14 flight control system software
[AIAA PAPER 77-1077] p0385 A78-39183
Application techniques for digital flight control systems
p0550 N78-30117
HARTIN, E. D.
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils
[AIAA PAPER 78-11] p0171 A78-22553
HARTIN, F. W.
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
HARTIN, G. L.
Paneling techniques for use with the VORLAX computer program
[NASA-CR-145364] p0405 N78-25054
HARTIN, J. A.
Ramjet propulsion for single-stage-to-orbit vehicles
[SAE PAPER 771011] p0182 A78-23843
HARTIN, T. A.
Some applications of a test track for aerodynamic testing
[AIAA PAPER 78-167] p0160 A78-20719
HARTONE, J. A.
Subisokinetic sampling errors for aircraft turbine engine smoke probes
p0379 A78-38575
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
HARTORANO, L.
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
HARTORELLA, H. P.
V/STOL hover stability impact on hover control task
p0258 N78-19102
HARTY, M.
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
HARUSII, O. I.
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
HARUSZKIEWICZ, J.
Dynamics of the longitudinal motion of an airplane with a variable-geometry wing
p0523 A78-49285
HARUTA, Y.
Noise from separated flow of flat plate
p0577 A78-50622
HARVIN, J. G.
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
HARX, M. F.
Computer redundancy for aircraft flight control
[AIAA 77-1440] p0014 A78-12694
Electromagnetic force motor design using rare earth-cobalt permanent magnets
p0067 A78-15692
HARYNIAK, J.
Lateral stability of a light aircraft during landing
p0167 A78-21020
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
HASCITTI, V. R.
A preliminary study of the performance and characteristics of a supersonic executive aircraft
[NASA-TM-74055] p0095 N78-13040
HASEK, Z.
Influence of structural components of a by-pass engine on its flight characteristics
p0277 A78-29582
HASLOV, A. P.
Mutual counteraction of two moving objects. I
p0338 A78-34960
HASLOV, B. N.
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
HASLOV, L. A.
Calculation of the flow past a fuselage of arbitrary configuration at low velocities
p0163 A78-20845
Computation of the pressure on the surface of a fuselage with a wing in an ideal fluid
p0278 A78-29712
HASON, K. G.
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas
[AD-A053938] p0452 N78-27106
HASON, R. C.
DAIS - Design and performance
[AIAA 77-1499] p0006 A78-12247
HASON, W. H.
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
HASSIER, P. F.
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
HASSON, A.
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
HASUDA, C.
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
HASZATICS, J.
APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
HATASSOV, G.
Space optical communications with the Nd:YAG laser
p0285 A78-30886
HATHENY, N. W.
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
HATHER, R. L.
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
HATHESON, N.
Stability of helicopter slung loads
[ARL/AERO-NOTE-364] p0196 N78-16040
HATHESON, R. J.
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
HATHEWS, H. S., III
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
HATHUR, P. S.
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109

MATLOFF, G. L.
Feasibility of an orbital simulator of stratospheric photochemistry
p0589 A78-51816
MATOI, T. K.
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
MATOKHNIUK, L. E.
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
MATSUDA, Y.
Research and development of digital jet-engine controls
p0578 A78-50626
MATSUHIRO, D. S.
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
MATSUKI, M.
Recent status on research and development of PJR 710 turbofan engine
p0573 A78-50577
MATSUOKA, K.
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
MATSUSHITA, H.
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
MATSUURA, T.
Experimental study on blade bending vibration
[CUED/A-TURBO/TR-88] p0361 N78-23090
MATSUYAMA, G. T.
A computerized undergraduate aircraft design course
[AIAA PAPER 78-1492] p0515 A78-47933
MATTA, R. K.
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
MATTHEWS, R. K.
Supersonic aerothermal testing - A new requirement
[AIAA 78-773] p0294 A78-32333
MATTINGLY, W. R.
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
MATTON, G.
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897
MATYAS, J.
Display of radar information by the strata method
p0426 A78-42774
MATYSEK, T. E.
The versatility of Jovial J73 in avionics systems
p0536 A78-49956
MATZ, R. J.
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
MAUCH, H. R.
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
MAUGMER, M.
Aerodynamic and hovering control of LTA vehicles
[AD-A045315] p0082 N78-12047
MAULE, C. R.
Performance monitor and data acquisition system for real-time embedded computers
p0064 A78-15636
MAUNDER, L.
The response of a Hooke's-joint gyroscope to linear vibration
p0593 A78-52647
MAURER, H. A.
Solid-state active RF missile seeker - Future role in all-weather systems
p0054 A78-14935
MAURER, J. J.
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
MAVROIDES, W. G.
Experimental evaluation of an array technique for zenith to horizon coverage
p0370 A78-36380
MAXWELL, R. D. J.
Current standards of fatigue test on strike aircraft
[AGARD-AR-92] p0242 N78-18051
MAY, C. J.
The airline's role in the certification of aircraft - Criteria for air transport selection
p0417 A78-40995
MAYER, A.
Advanced environmental control for avionic systems
p0060 A78-15559
MAYES, W. H.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874
MAYFIELD, J. P.
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
MAYO, M. G.
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
MAYS, R. A.
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
MAZIA, V. G.
Uniqueness theorem for an integral equation of a rectangular thin-section wing
p0130 A78-20201
MAZUROV, A. P.
Calculation of the Laval-nozzle flow by a modified Lax-Wendroff method of second-order accuracy
p0166 A78-20970
MAZZA, C. J.
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
MAZZA, J. D.
A comparison of integrated and conventional cockpit warning systems
[AD-A048670] p0239 N78-18022
MAZZAWY, R. S.
P100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
MCADAM, P. A.
Joint ASD/AFWAL Combined Environment Reliability Test /CERT/ Evaluation Program
p0291 A78-32118
MCALISTER, K. W.
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
Water-tunnel experiments on an oscillating airfoil at RE equals 21,000
[NASA-TM-78446] p0253 N78-19058
MCALPINE, G. A.
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
MCARDLE, J. C.
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
MCAULAY, R. J.
Interferometer design for elevation angle estimation
p0001 A78-10304
MCCABE, E. P., JR.
Assessment of load alleviation devices installed on a power-augmented-ram wing over irregular waves
[AD-A045425] p0622 N78-33049
MCCALLA, T. M.
Preliminary candidate advanced avionics system for general aviation
[NASA-CR-152025] p0024 N78-10060
MCCARTHY, D.
Types of rotor failure and characteristics of fragments
p0025 N78-10073
MCCARTHY, J.
Aircraft response to boundary layer turbulence and wind shear associated with cold-air-outflow from

a severe thunderstorm
p0055 A78-14964
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
MCCARTHY, J. F., JR.
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
MCCARTY, J. E.
Adhesive bonded aerospace structures standardized repair handbook
[AD-A055684] p0614 N78-32270
MCCARTY, J. L.
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043
MCCAWLEY, T. Q.
Mathematical analysis of impact erosion
p0588 A78-51711
MCCLELLAN, K. L.
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
MCCLINTON, C. R.
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
Interaction between step fuel injectors on opposite walls in a supersonic combustor model
[NASA-TP-1174] p0362 N78-23094
MCCLOUD, J. L., III
A note on multicyclic control by swashplate oscillation
[NASA-TM-78475] p0323 N78-21159
MCCLUNG, D. A.
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
MCCLUNG, T.
RPV video digital multiplexing system
p0063 A78-15613
MCCLURE, J. D.
Analysis of the engine fragment threat and the crush environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078
MCCLURE, K. R.
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
MCCOLGAN, C. J.
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058
MCCOMAS, A. D.
Airport traffic surveillance
p0594 A78-52957
MCCONKEY, E. D.
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075
MCCONNELL, J. J.
Applications for airborne digital communications
p0590 A78-51896
MCCORMICK, B. W.
A critical look at V/STOL technology
[AIAA PAPER 78-1526] p0481 A78-46502
MCCORMICK, R. B.
Rotor burst protection criteria and implications
p0025 N78-10071
MCCOVEY, E.
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
MCCROSKEY, W. J.
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
Some unsteady separation problems for slender bodies
p0249 N78-18383
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Some unsteady separation problems for slender bodies
p0493 N78-28405
Prediction of unsteady separated flows on oscillating airfoils
p0494 N78-28409
MCCUNE, J. E.
Three-dimensional flow in highly-loaded axial turbomachines
p0002 A78-11631
Three-dimensional inviscid flow through a highly-loaded transonic compressor rotor
p0010 A78-12288
MCCURDY, D. A.
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873
MCDANIEL, W. C.
Antitorque training: Evaluation of effectiveness in reducing mishap losses
[AD-A055040] p0561 N78-31092
MCDANIEL, W. L., JR.
A comparison of three computerized design algorithms for control systems
p0107 A78-17527
MCDONALD, W.
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
MCDONEL, J. D.
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
MCELHENNEY, J.
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
MCFADDEN, J.
Aircraft Satellite Data Link
p0338 A78-34971
MCFARLAND, A.
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
MCGARVEY, J. H.
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 1: Summary report
[AD-A051318] p0396 N78-24118
MCGEE, L. A.
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
MCGEHEE, J. R.
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Validation of a Flexible Aircraft Take-Off and Landing Analysis (FATOLA)
[NASA-TP-1025] p0022 N78-10049
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052
MCGEHEE, R. H.
Bank-to-turn /BIT/ autopilot technology
p0534 A78-49927
MCGHEE, R. J.
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
MCGINNESS, H.
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583

MCGOVERN, S. A.
S-3A composite spoiler in-service evaluation
p0219 A78-25209
MCGOWAN, J. A.
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways, appendixes
[NASA-CR-145281] p0200 N78-16066
MCGOWAN, P. R.
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
MCGREGOR, K.
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
MCGREGOR, R. M.
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
Quiet propeller/rotor concept evaluation
[AD-A047297] p0197 N78-16047
MCGROGAN, P.
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
MCHUGH, D. P.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
MCHUGH, F.
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
MCILVENNA, J.
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
MCINTOSH, S. C., JR.
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Modifications and improvements in a structural optimization scheme based on an optimality criterion
[AD-A055941] p0609 N78-32088
MCINTURFF, J. A.
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
MCIVER, D.
Coming cockpit avionics
p0231 A78-28220
MCKEE, R. G.
Fire detector response in aircraft applications
p0599 A78-53674
MCKENZIE, J. R.
Ride technology applications to large passenger aircraft
p0331 A78-33443
MCKILLIP, R. M., JR.
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091
MCKINLAY, W. H.
Navigation, guidance and control for high performance military aircraft
p0316 N78-21090
MCKINLEY CONWAY, H.
The airport city and the future intermodal transportation system
p0336 A78-34724
MCKINLEY, J. L.
Aircraft powerplants /4th edition/
p0332 A78-33805
MCKINNEY, L. W.
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
MCKINZIE, D. J., JR.
EBF noise suppression and aerodynamic penalties
[NASA-TM-73823] p0155 N78-15852
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
MCKINZIE, L. J., JR.
EBF noise suppression and aerodynamic penalties
[AIAA PAPER 78-240] p0162 A78-20763
MCLALLIN, K. L.
Effect of endwall cooling on secondary flows in turbine stator vanes
p0041 N78-11098
MCLAUGHLIN, A. L.
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
MCLAUGHLIN, H. B.
A new method for cutting honeycomb and composite materials for structural members
p0077 A78-16875
MCLAUGHLIN, P. W.
High frequency dynamic engine simulation
[NASA-CR-135313] p0097 N78-13059
MCLEAN, A. F.
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
MCLEAN, D.
Gust-alleviation control systems for aircraft
p0470 A78-44397
MCLEMORE, H. C.
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
MCLUCAS, J. L.
Prospects for a new generation air transport
[AIAA PAPER 78-363] p0186 A78-24035
MCMAHON, H. M.
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
MCMANUS, B. L.
Heavy lift helicopter flight control system. Volume 2: Primary flight control system development and feasibility demonstration
[AD-A049580] p0323 N78-21163
MCMENAMIN, J. J., JR.
A life cycle cost study of contractor versus organic support of aircraft programs
[AD-A049438] p0312 N78-21045
MCNALLY, W. D.
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
MCNARY, C. A.
Advanced pattern matching for navigation and guidance
p0539 A78-49998
MCNEILL, W. P.
Nickel brazing honeycomb for aircraft gas turbine engines
p0600 A78-53751
MCPHEE, W. J.
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
MCPHERSON, R. L.
YC-14 flight test program
p0233 A78-28458
MCQUIEN, L. J.
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
MCRAE, G.
Economic and safety aspects of prolonging engine life
p0217 A78-25142
MCRUER, D.
New trends and problem areas in automatic flight control

p0282 A78-30252
MCSWEENEY, T. I.
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
MCTEE, A. C.
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078
MCVEIGH, M. A.
Pilot evaluation of an advanced hingeless rotor XY-15 simulation
[NASA-CR-152034] p0022 N78-10046
MCWILLIAMS, I. G.
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
MEAD, S. L.
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
MEADE, L. E.
Material development for laminar flow control wing panels
p0218 A78-25200
MEADOWS, A. J.
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
MEDGYESI-MITSCHANG, L. N.
HF radiation characteristics of the RH-53D helicopter and the Mark 105 AMCM system
[AD-A049795] p0325 N78-21358
MEDINAH, E. M.
Analysis of optimal turning maneuvers in the vertical plane
[AIAA 78-1333] p0482 A78-46531
MEDVEDEV, I. V.
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
MEDVEDEVA, M. A.
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
MEECHAM, W. C.
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
MEHDI, I. S.
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Dynamic analysis of electrical systems
p0535 A78-49934
MEHRA, M.
Boundary layer blowing tests on a radial diffuser in low and subsonic Mach range
p0374 A78-37411
MEHRA, R. K.
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
MEHROTRA, S. C.
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
A theroretical investigation of the aerodynamics of low aspect-ratio wings with partial leading-edge separation
p0449 N78-27075
MEHTA, G. K.
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
MEHTA, R. D.
The aerodynamic design of blower tunnels with wide-angle diffusers
p0075 A78-16647
MEHTA, U. B.
Dynamic stall of an oscillating airfoil
p0346 N78-22055
MEIER, H. U.
Wind tunnel model and measuring techniques for the investigation of three-dimensional turbulent boundary layers
[AIAA 78-781] p0295 A78-32340
MEIJER, J. J.
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
MEIROVITCH, L.
Structural dynamics, stability, and control of helicopters
[NASA-CR-158909] p0552 N78-30139
MEISEL, E.
Civil components program "Wing Section Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
MEISTER, E.
Some mixed boundary value problems for subsonic flow past oscillating profiles
p0584 A78-51198
MEITZLER, T. D.
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
MEJDRICH, R. R.
Advanced technology servicing equipment for army aircraft
[AD-A052652] p0400 N78-24158
MEKEL, R.
A learning flight control system for the F8-DFBW aircraft
[AIAA 78-1288] p0542 A78-50195
An adaptive learning control system for aircraft
[NASA-CR-156930] p0413 N78-25966
MELEASON, E. T.
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
MELEWICZ, F. V.
Technical, economic and operational aspects of an FAA engineering study and feasibility determination for a ground-based warm fog dispersal system
p0056 A78-14993
MELICK, H. C., JR.
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
MELLETTE, R. V.
Modification of aerojet cumulative damage criterion to utilize nonlinear stress allowable
p0100 N78-13223
MELLOR, A. M.
Review of flashback reported in prevaporizing/premixing combustors
p0377 A78-37772
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
Alternative fuel effects upon combustion efficiency in continuous combustors
p0572 A78-50571
MELNIK, R. E.
An analysis of the leading-edge singularity in transonic small-disturbance theory
p0419 A78-41452
MELNIKOVA, O. F.
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
MELSON, W. E., JR.
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
MELUZOV, IU. V.
Statistical modeling of optimal GTE parameter trimming
p0049 A78-13173
MELVIN, W. W.
Problems pilots face involving wind shear
p0268 N78-19722

MENDENHALL, M. R.
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050
MENG, P. R.
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
MENTHE, R. W.
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
MENTZEL, G.
Technical-economic analysis of the direct operating costs of air transport companies
p0589 A78-51752
MERCADO, N.
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655
MERCKER, E.
Blockage correction for aerodynamic measurements in a closed subsonic wind tunnel
p0570 A78-50303
MEREDITH, B. D.
Investigation of a high speed data handling system for use with multispectral aircraft scanners
[NASA-TM-78689] p0310 N78-20481
MEREDITH, P.
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
MERHAV, S. J.
Display augmentation in manual control of remotely piloted vehicles
p0231 A78-28148
MERKLI, P. E.
Flow starting times in constant-area supersonic diffusers
p0076 A78-16810
MERLINO, F. X.
A contractor's perception of design to life cycle cost
p0060 A78-15553
MERRICK, V. K.
Study of the application of an implicit model-following flight controller to lift-fan VTOL aircraft
[NASA-TP-1040] p0199 N78-16063
MERRILL, W.
Output feedback regulator design for jet engine control systems
p0215 A78-24898
MERRILL, W. C.
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
MERRIMAN, J. E.
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
MERRITT, H. R.
Air traffic control and energy conservation in air operations
p0288 A78-31314
MESCHKO, E. T.
The F-4E Austere HUD/Gunsight project
p0380 A78-38746
MESHCHERIAKOVA, T. P.
The design of aircraft and helicopter protection systems
p0070 A78-15937
MESSITER, A. F.
Large amplitude shock wave motion in two dimensional transonic channel flows
[AIAA PAPER 78-247] p0162 A78-20770
MESTRE, A.
Study of a turbomachine combustor with swirling flow
[ONERA, TP NO. 1977-170] p0108 A78-17662
METZGER, F. B.
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
MEUNIER, J.
Methodology for optimizing an air fleet
p0116 A78-18668
MEVILLOT, J. C.
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
MEYER, D. D.
The design process
[AIAA PAPER 78-1483] p0514 A78-47928
MEYER, D. H.
System requirements for transition from enroute to approach guidance
p0370 A78-36453
MEYER, R. C.
Configuration development of a supersonic cruise strike-fighter
[AIAA PAPER 78-148] p0173 A78-22587
MEYER, R. R., JR.
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface
p0605 N78-32058
MEYER, W. L.
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
MEYERS, J. F.
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques
[NASA-TP-1168] p0325 N78-21410
MIAO, W.
Bearingless tail rotor loads and stability
[AD-A049579] p0317 N78-21098
MIAZINA, L. I.
Automated channel and trough-shaped surface design system algorithm
p0049 A78-13174
MICHAELS, L. P.
More public consultation on airport plans
p0275 A78-29208
MICHAELSON, G. L.
Advanced composites wing study program. Volume 1: Executive summary
[NASA-CR-145382-1] p0613 N78-32185
Advanced composites wing study program, volume 2
[NASA-CR-145382-2] p0613 N78-32186
MICHALEWICZ, K.
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
MICHARD, P.
Calculation of exchange coefficients for high-temperature turbine blades
[ONERA, TP NO. 1978-104] p0508 A78-47348
MICHARD, P. J.
Measuring techniques in high temperature turbines
p0322 A78-21151
MICHEL, K. W.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
MICHEL, R.
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
MICHEL, U.
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
MICHELSON, S.
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113
MICKELSON, W. A.
Velocity aiding of noncoherent GPS receiver
p0062 A78-15590
MIDDLETON, J.
Airborne television transmission

p0477 A78-45218
MIDOLO, L.
Advanced environmental control for avionic systems
p0060 A78-15559
MIGNOSI, A.
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
MIHALOEW, J. R.
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Real time digital propulsion system simulation for manned flight simulators
[NASA-TM-78958] p0456 N78-27137
MIJARES, R. D.
Why fly supersonically
p0109 A78-17889
MIKHAIL, A. G.
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
MIKHAIL, E. M.
Geometric restitution of single coverage aircraft multispectral scanner data
p0280 A78-29854
MIKHAIL, M. N.
Optimum design of wind tunnel contractions
[AIAA 78-819] p0297 A78-32373
MIKHAILOV, A. A.
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
MIKHAILOV, O. I.
Automatic control of airplanes and helicopters
p0015 A78-12849
MIKHNEV, V. F.
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
MIKKILINENI, R. P.
The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
MIKOLAJCZAK, A. A.
Comparison of prediction of transonic flow in a fan with flow measurements taken using a laser Doppler velocimeter
p0012 A78-12314
MIKOLOWSKY, W. T.
The military utility of very large airplanes and alternative fuels
[AD-A053604] p0487 N78-28051
MIKUS, T.
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116
MILES, G. A.
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
MILES, R. E.
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
MILFORD, C. M.
VTOL performance estimation for jet lift aircraft
p0435 N78-26082
MILLER, B. A.
Effect of design changes on aerodynamic and acoustic performance of translating-centerbody sonic inlets
[NASA-TP-1132] p0236 N78-17998
Status of advanced turboprop technology
p0447 N78-27055
MILLER, B. J.
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914
MILLER, C. G.
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-X-74945] p0089 N78-12105
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-78637] p0152 N78-15060
MILLER, D. R.
A maintenance model for k-out-of-n subsystems aboard a fleet of advanced commercial aircraft
[NASA-CR-145272] p0345 N78-22020
MILLER, G.
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372
MILLER, G. E.
Flying qualities of an aircraft with strong lateral-directional coupling
[AIAA 78-1361] p0484 A78-46550
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
MILLER, G. K., JR.
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
MILLER, K.
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
MILLER, K. H.
Solar power satellite construction and maintenance - The first large-scale use of man-in-space
[AIAA PAPER 78-1637] p0591 A78-51977
MILLER, K. L.
Ejection under deceleration
[AD-A046117] p0138 N78-14018
MILLER, L. C.
EAR navigation update modes
p0066 A78-15667
MILLER, L. E.
Performance methods for aircraft and missiles
p0434 N78-26075
Supercruiser fighter analysis
p0549 N78-30107
MILLER, M. P.
Fuels outlook I - Transportation and the U.S. petroleum resource, an aviation perspective
[AIAA PAPER 78-357] p0186 A78-24032
MILLER, P. D.
New materials in the Si-C-Al-O-N and related systems
p0601 A78-53864
MILLER, R. L.
Fabrication of advanced composite attach lugs for aircraft structures
p0070 A78-15943
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
Arrival inspections/pre-operational inspections (aviation materiel)
[AD-A047260] p0202 N78-16376
Test operations procedures physical characteristics aviation material
[AD-A053196] p0408 N78-25086
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091
Physical characteristics: Aviation materiel
[AD-A055803] p0610 N78-32093
MILLER, R. W.
Coatings for aircraft which operate in marine environments
p0468 A78-44113
MILLER, T. J.
An overview of aerospace gas turbine technology of relevance to the development of the automotive gas turbine engine
[NASA-TM-73849] p0098 N78-13062
MILLER, W. T.
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
MILLIGAN, R. W.
The effect of free-stream turbulence upon heat transfer to turbine blading

p0323 N78-21155
MILLION, D. J.
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
MILLS, J. S.
Mathematical analysis of impact erosion
p0588 A78-51711
MINURA, P.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
MINAILOS, A. N.
Interaction of a shock wave with an entropy layer
p0164 A78-20886
Inviscid supersonic flow about a thin rectangular plate
p0165 A78-20906
Supersonic flow near a thin trapezoidal wing
p0166 A78-20921
Effect of the thickness of profile and trailing edge on the flow field and the aerodynamic characteristics of a low-aspect-ratio delta wing at M = 3
p0166 A78-20949
Calculation of supersonic flows past wings with allowance for trailing tangential discontinuities within the framework of a model employing a system of Euler equations
p0274 A78-28958
Influence of the transverse curvature of the lower surface in the conical supersonic flow field of a delta configuration
p0429 A78-43107
MINECK, R. E.
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage
[NASA-TM-74033] p0604 N78-32049
MINER, J. E.
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
MINNETT, H. C.
Interscan - A new microwave approach and landing guidance system
p0522 A78-48736
MINNICK, J. I.
Operations and economics of U.S. air transportation
[AIAA PAPER 78-1545] p0528 A78-49770
MINSK, L. D.
Freeze-thaw tests of liquid deicing chemicals on selected pavement materials
[AD-A051771] p0493 N78-28279
MIRANDA, L. R.
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
MIRNOVICH, L. A.
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
MIRONOV, A. I.
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
MISHNEV, B. P.
Optimal control of the longitudinal motion of a helicopter on the basis of an operational algorithm
p0293 A78-32272
MISIEWICZ, V. J.
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
MISRA, U. N.
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
MITCHELL, J. R.
A comparison of three computerized design algorithms for control systems
p0107 A78-17527
MITCHELL, N. A.
A comparison of experimental results and three-dimensional theoretical predictions for a compressor rotor with inlet-distortion, with special reference to Stalling
[CUED/A-TURBO/TR-91] p0362 N78-23092
MITIUSHKIN, IU. I.
Investigation of turbine stages with radial blades
p0467 A78-43643
MITRA, N. K.
Similarity considerations for nonequilibrium nozzle flows
p0583 A78-51163
MITROFANOV, A. A.
Laser and optical methods of monitoring in aircraft construction
p0281 A78-30123
MIXSON, J. S.
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
MIYAI, Y.
An alternative treatment of lifting-line theory as a perturbation problem
p0582 A78-50904
MIYASHIRO, S. K.
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
MIZUHACHI, N.
A development of advanced radial gas turbine for automobile
p0575 A78-50603
MOAVENI, M. K.
Radio interference in helicopter-borne pulse Doppler radars
p0285 A78-31038
MODLINGER, A.
Mission management in the airport vicinity
[DGLR PAPER 77-037] p0190 A78-24427
MOFFATT, M. E.
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
MOFFITT, T. P.
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
MOHAN, B.
Estimated temperature corrections for the Menaka-II meteorological rocket payload
p0479 A78-45341
MOHANTY, A. K.
Transient speed response of a gas turbine
p0122 A78-19229
MOHR, R. L.
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
MOISEENKOV, N. V.
Using surface plastic deformation to increase the fatigue strength of aircraft gas-turbine compressor disks
p0133 A78-20390
MOKROWIECKI, A.
VASI-S - A visual landing aid
p0468 A78-43800
New organization of air traffic over the North Atlantic region
p0588 A78-51599
MOLCHANOV, V. P.
Some aspects of the calculation of flows with tangential discontinuities
p0128 A78-19689
MOLCHANOV, V. P.
Dynamics of a string accelerometer
p0131 A78-20256

MOLYNEUX, W. G.
The potential of advanced technology for aircraft structures /10th J. D. North Memorial Lecture/ p0570 A78-50400
MOMIYAMA, T. S.
NAVTOLAND and flying qualities p0260 N78-19120
MONACO, R.
On the theory of drag calculation and profile optimization in shockless near free molecular flow p0510 A78-47887
MONAGHAN, R. C.
Flight-measured buffet characteristics of a supercritical wing and a conventional wing on a variable-sweep airplane
[NASA-TP-1244] p0358 N78-23056
MONAKHOV, N. M.
Uniformly precise conformal mapping of the exterior of a circle onto the exterior of a wing section p0174 A78-22642
Uniformly exact conformal transformation of exterior of circle onto exterior of wing profile p0518 A78-48224
MONFORT, M. J.
Data transmission aboard aircraft p0417 A78-40869
MONGIA, H. C.
An empirical/analytical design methodology for gas turbine combustors
[AIAA PAPER 78-998] p0464 A78-43545
Pollution reduction technology program for small jet aircraft engines: Class T1 p0039 N78-11070
Pollution Reduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104
MONICO, P. D.
Investigation of a discrete C-Star transient response controller for the YF-16 at a selected flight condition
[AD-A053441] p0456 N78-27139
MONTA, W. J.
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
MONTASSER, W.
The effects of nozzle geometry on the performance of an axisymmetric thrust augmentor p0481 A78-46354
MONTGOMERY, H. A.
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example p0533 A78-49900
MONTGOMERY, R. C.
A moving window parameter adaptive control system for the F8-DFBW aircraft p0013 A78-12361
A learning flight control system for the F8-DFBW aircraft
[AIAA 78-1288] p0542 A78-50195
Determination of optimal control using imbedding of the terminal conditions p0357 N78-23029
MONTOYA, L. C.
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds
[NASA-TN-D-8474] p0299 N78-20065
MOODY, P.
Simulation as a routine tool for resource and workload planning p0052 A78-13850
MOOIJ, H. A.
Flight test of stick force stability in attitude-stabilized aircraft
[NLR-MP-77015-U] p0246 N78-18080
MOOK, D. T.
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
MOON, J. E.
Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
MOORADIAN, G. C.
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
MOORE, D. W.
Vortex dynamics p0582 A78-51051
MOORE, F. L.
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
MOORE, J. E.
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
MOORE, J. W.
Conceptual design study of power augmented ram wing in ground effect aircraft
[AIAA PAPER 78-1466] p0512 A78-47915
MOORE, M. T.
Sound separation probes for flowing duct noise measurements p0106 A78-17396
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report
[NASA-CR-152076] p0271 N78-19899
MOORE, P. D.
Douglas Aircraft Company laser tracker p0124 A78-19436
MOORE, R. A.
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073
MOORE, R. D.
Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108
MOORE, R. E.
Combined military and commercial application of light helicopters p0262 N78-19136
MOORHOUSE, D. J.
Airspeed control under wind shear conditions p0071 A78-16185
MOORTHY, C. S.
Effect of blockage ratio on the turbulent near wake of a bluff body p0224 A78-26489
MOOSE, R. L.
A performance analysis of a radar tracking filter p0107 A78-17564
MORAWSKI, J.
Systems analysis of safety in aviation. I p0178 A78-23470
Systematic analysis of safety in aviation. II p0278 A78-29674
MOREAU, J.-P.
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
MORSFIELD, C. L.
Solution of multitarget, multisensor tracking

problems on the Illiac IV parallel processor
p0113 A78-18063
MOREHOUSE, G. G.
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
MORELLI, J. J.
Some airline experience in preventing engine rotor failures
p0027 N78-10090
MORELLI, P.
Instantaneous longitudinal maneuvers of aircraft - A simple expression for the first-approximation evaluation of tail load increments
p0122 A78-19097
MORELLO, S. A.
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
Terminal-area flight experience with the NASA Terminal Configured Vehicle
p0291 A78-31972
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
Flight experiments to improve terminal area operations
[NASA-TM-78685] p0359 N78-23070
Recent flight test results using an electronic display format on the NASA B-737
p0432 N78-26063
Flight experiments to improve terminal area operations
p0497 N78-29058
MORETTI, A.
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345
MORFEY, C. L.
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
MORGAN, J. D.
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report
[AD-A054016] p0550 N78-30119
MORGAN, P. H.
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060
MORGAN, R. J.
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
MORGOLENKO, A. S.
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
MORI, K.
Development of the can-type gas turbine combustors
p0574 A78-50590
MORIARITY, T. M.
Modeling of Air Data Computers in test system software
p0065 A78-15650
MORIGAMI, Y.
Temperature profiles of rotating cooled blade
p0573 A78-50581
MORIMATSU, T.
Near-hole region heat transfer in full-coverage film cooling
p0573 A78-50579
MORIN, O. V.
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
MORIN, S.
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
MORINO, L.
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Aerodynamic interference effects on tilting proprotor aircraft
[NASA-CR-152053] p0092 N78-13007
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046
MORISHITA, T.
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592
Experiment on aerodynamic and heat transfer characteristics of a cooled turbine cascade losing a few blades
p0575 A78-50600
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
MORISON, R.
RPV video digital multiplexing system
p0063 A78-15613
MORISSET, J.
Mirage 2000
p0288 A78-31755
Aerospatiale is ready to develop a convertiplane with tethering rotors
[NASA-TM-75038] p0206 N78-17042
A new helicostat from SNIAS helicopter division
[NASA-TM-75063] p0240 N78-18041
MORKOVIN, M. V.
Features of unsteady flows over airfoils
p0346 N78-22054
MOROSHKIN, M. IA.
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
MOROZ, A. P.
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
MORR, H.
A computer-controlled system for fatigue testing under simulated service loading
p0420 A78-41519
MORRIS, C. E. K., JR.
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
MORRIS, D. J.
A survey of computational aerodynamics in the United States
[NASA-SP-394] p0033 N78-11007
MORRIS, F. E.
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
MORRIS, G. V.
A modular side looking airborne radar to fulfill a multitude of surveillance missions
p0587 A78-51543
MORRIS, O. A.
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95
[NASA-TM-78706] p0604 N78-32050
MORRIS, R. E.
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309

Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
MORRIS, S. J.
Computer program for the design and off-design performance of turbojet and turbofan engine cycles
[NASA-TM-78653] p0551 N78-30122
MORRIS, W. H.
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131
MORRISON, S. R.
Exploratory development of conductive coating materials
[AD-A048253] p0247 N78-18138
MORRISSEY, L. J.
Simulation of the uncontrolled terminal area air traffic to evaluate the 'see and avoid' concept
p0428 A78-43042
MORROW, J.
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
MORSE, F.
Airships - The next generation and beyond
p0386 A78-39396
MORTIMER, A. R.
Calibration of the West Canadian Loran-C chain
p0425 A78-42511
MORTON, J. B.
Unsteady loads due to propulsive lift configurations. Part A: Investigation of scaling laws
[NASA-CR-156120] p0300 N78-20067
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Investigations of scaling laws for jet impingement
p0393 N78-24074
MOSES, C. A.
Combustor performance of high availability fuels
p0572 A78-50568
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259
MOSES, L. T.
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
MOSES, N.
Status of aircraft noise control in Israel
p0015 A78-12823
Problems of noise certifying business aircraft
p0015 A78-12824
MOSESIAN, B.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
MOSHER, M.
A study of the noise radiation from four helicopter rotor blades
p0621 N78-32835
MOSKOWITZ, L.
Metallurgical behavior of arresting gear deck pendants
p0218 A78-25185
MOSS, A. R.
Digitized radar data compressor
[AD-A057442] p0632 N78-33290
MOSTOVOY, S.
Fracture mechanics for structural adhesive bonds
[AD-A054023] p0504 N78-29509
MOTYKA, P.
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
MOUILLE, R.
The AS 350 light helicopter
p0263 N78-19140
MOULDEN, T. H.
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
MOUSSALLY, G. J.
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073
MOW, D. F.
VSTOL - Can Navy needs be met
[AIAA PAPER 78-322] p0185 A78-24016
MOWFORTH, E.
A solar airship - More than a flight of fancy
p0469 A78-44226
MOYEN-VAN SLIMMING, O. R.
A flexible approach to on-board computer simulation
p0068 A78-15706
MOYER, D. W.
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
MOYNES, J. F.
Flight control system design for ride qualities of highly maneuverable fighter aircraft
p0431 N78-26054
MOZO, B. T.
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
MOZOLKOV, A. S.
Determination of airfoil lift from pressure measurement at the test section walls in a subsonic wind-tunnel
p0167 A78-20973
MROZ, T. S.
Emissions control for ground power gas turbines
p0039 N78-11072
MRSTIK, A. V.
Multipath limitations on low-angle radar tracking
p0222 A78-26157
Multistatic-radar binomial detection
p0222 A78-26158
MUDD, L. E.
Airfield pavement evaluation - FAA viewpoint
p0526 A78-49681
MUECK, G.
AIRTRACK - A system for air traffic control
p0073 A78-16376
MUEHTER, V.
Glide path augmentation with inertial flight path angle
[AD-A046363] p0149 N78-15025
MUELLER, J.
Control of aircraft turbine engine acceleration
p0277 A78-29583
Use of a stepping motor for measuring fuel quantity in a digital system for control of rotational speed
p0277 A78-29586
MUELLER, R.
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
MUELLER, R. W.
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
MUENZBERG, H. G.
Energy economy with high temperature gasturbine
p0575 A78-50604
MUIRHEAD, V. U.
An investigation of drag reduction for tractor trailer vehicles
[NASA-CR-144877] p0633 N78-33444
MUKHERJEE, D. K.
Experimental verification of a blade cooling system and comparison with design calculation
p0573 A78-50583
MUKHERJEE, M. K.
Role of titanium in aerospace applications
p0123 A78-19402
MUKHIN, A. A.
Operational experience with long-safe-life

gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
MULABZ, E. J.
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Emissions control for ground power gas turbines
p0039 N78-11072
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
MULCAHY, J. F.
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097
MULCARE, D. B.
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
MULCAY, W.
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
MULDER, J. A.
The measurement of performance and stability and control characteristics of a high subsonic jet aircraft in non-steady flight conditions employing high accuracy instrumentation techniques
p0074 A78-16596
MULHOLLAND, R.
Simulation model for air traffic control communications
[AD-A044256] p0037 N78-11045
MULLEN, J. B.
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
MULLER, J.-P.
Research in a pre-vaporization combustion chamber on natural gas in liquid and gaseous states
p0342 A78-35897
MULLIGAN, J. C.
Design and operation of an airborne air quality measurement system
p0107 A78-17575
MUNRO, N.
Design of aircraft autostabilisation systems using the inverse Nyquist array method
p0073 A78-16334
MUNROE, L. R.
Equipment to neutralize aircraft fuel spills
[AD-A053862] p0460 N78-27628
MUNSER, H. J.
Digital computer program maneuver pilot
p0290 A78-31946
Simulation tests of anti-flak profiles
p0290 A78-31951
MUNSON, A. G.
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
MUNT, R.
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099
MUNT, R. M.
The interaction of sound with a subsonic jet issuing from a semi-infinite cylindrical pipe
p0122 A78-19213
MURACA, R. J.
A perspective of laminar-flow control
[AIAA PAPER 78-1528] p0481 A78-46503
Laminar flow control overview
p0448 N78-27066
MURATA, S.
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
MURDEN, W. P.
Fighter superiority by design
p0549 N78-30105
MURMAN, E. M.
Computation of transonic potential flows in turbomachinery
p0011 A78-12293
MURPHY, J. W.
Formulation of Iowa State airport system
p0229 A78-27548
MURPHY, R., JR.
Low frequency combustion instability in augmentors
p0321 N78-21138
MURRAY, A. L.
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040
MURRAY, B. E.
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894
MURRAY, J. J.
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
MURRIN, L.
Design problems associated with the B-1 Composite Horizontal Stabilizer
p0109 A78-17890
MURROW, H. N.
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
MURTHY, A. V.
An intermittent high-Reynolds-number wind tunnel
p0130 A78-20193
An intermittent high Reynolds number wind tunnel
[AIAA 78-766] p0293 A78-32327
MURTHY, S. N. B.
Proceedings of the Workshop on Engine-Airframe Integration Short-Haul Aircraft
[AD-A053417] p0499 N78-29088
MUSANOV, S. V.
An analytic study of free molecule flow fields at the front and back edges of a plate
p0274 A78-28972
MUSIC, P. D.
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
MUSS, J. A.
Aircraft noise - Federal pre-emption of local control, Concorde and other recent cases
p0583 A78-51129
MUSSELWHITE, R. A.
The impact of contingency power concepts on V/STOL aircraft take-off-gross-weight
[AIAA PAPER 78-926] p0519 A78-48451
MUTHUKRISHNAN, M.
Similar solutions in nonequilibrium nozzle flows
p0221 A78-25728
MUTO, P. T.
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
MYBURGH, I. S.
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095
MYERS, P. A.
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
MYERS, T. D.
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
MYKYTOW, W. J.
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Airframe response to separated flow
p0438 N78-26116
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
MYRON, C. E.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074

N

NACHMIAS, S.
A learning flight control system for the F8-DFBW aircraft
[AIAA 78-1288] p0542 A78-50195
An adaptive learning control system for aircraft
[NASA-CR-156930] p0413 N78-25966
A learning control system with application to flight systems
p0629 N78-33112

NADYROV, N. A.
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792

NAEGELI, D. W.
Combustor performance of high availability fuels
p0572 A78-50568
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259

NAGABHUSHAN, B. L.
Dynamic stability of a helicopter carrying a suspended payload
[AIAA 78-1335] p0483 A78-46533
Systematic investigation of models of helicopter with a slung load
p0149 N78-15026

NAGABHUSHANAM, J.
Optimum design of a landing gear shock absorber system
p0224 A78-26480

NAGAI, N.
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591

NAGAO, Y.
Study on problems of terminal site location
p0369 A78-36323

NAGAOKA, S.
Estimating the average taxi speed of departing aircraft
p0571 A78-50450

NAGASHIMA, T.
Linearized supersonic unsteady flow in cascades
[ARC-R/M-3811] p0545 N78-30065

NAGASHIMA, Y.
Temperature profiles of rotating cooled blade
p0573 A78-50581

NAGATA, T.
Swirl flow in conical diffusers
p0230 A78-27910

NAGAYAMA, T.
Numerical analysis of flow through turbine cascade by the Modified FLIC Method
p0576 A78-50607

NAGY, F., JR.
Uplink coverage measurements in the Los Angeles area for passive BCAS
[AD-A048288] p0239 N78-18027

NAIK, S. N.
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995

NAKAHURA, K.
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592
A research on centrifugal compressor for small gas turbine - The effect of recirculating flow
p0576 A78-50612

NAKAMURA, Y.
The analysis of helicopter rotor noise
p0059 A78-15295
Improved methods for calculating the thickness noise
p0620 N78-32832

NAKANO, S.
A new air blast type combustor - Design, performance and emission
p0574 A78-50593

NAKAYAMA, M.
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591

NANDA, V.
Interference analysis between TRSB microwave landing system and adjacent C-band radars
[AD-A049882] p0304 N78-20101

NAPOLITANO, L. G.
The closed spline functions
p0415 A78-40493
Hermite closed splines
p0527 A78-49713

NAPPI, A.
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074

NARAYANA, T.
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487

NARAYANAN, S.
Optimum structural design of sheet-stringer panels subjected to jet noise excitation
p0230 A78-27887

NARKIS, Y.
Deployment forces in towing systems
p0188 A78-24365

NASH, J. M.
Airborne defensive fire control algorithms
p0063 A78-15627

NASLAIN, R.
The prospects for composites based on boron fibers
[NASA-TM-75305] p0457 N78-27185

NASSIRPOUR, F.
Runway roughness characterization by DDS approach
p0284 A78-30679

NASTRO, V.
Comparisons of tabular and observed Omega corrections through use of spectral analysis techniques
p0070 A78-15920
A simplification in position determination with the Omega system
p0070 A78-15921

NATH, G.
Unsteady three-dimensional compressible stagnation-point boundary layers
p0571 A78-50456
Unsteady laminar compressible boundary-layer flow at a three-dimensional stagnation point
p0571 A78-50503

NAUDASCHER, E.
The low-speed air tunnel of the Institute of Hydromechanics at the University of Karlsruhe
p0176 A78-23297

NAUGLE, D. F.
Air quality impact of aircraft at ten U.S. Air Force bases
[APCA PAPER 77-41,6] p0220 A78-25391
Air quality impact of aircraft at ten U.S. Air Force bases
p0292 A78-32222
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131

NAUMANN, E. C.
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706

NAYFEH, A. H.
Nonlinear aerodynamics of wing-body combination
[AIAA PAPER 78-1206] p0476 A78-45143
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035

NAZARENKO, R. A.
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636

NAZARETH, J. H.
STOL system fuel savings - Ground and air
p0287 A78-31312

NAZAROVA, T. I.
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322

NEGRO, J. E.
Base motion sensitivity analysis for airborne ILIC pointing and tracking systems
p0063 A78-15593

NEHRIB, M. H.
A study of the effect of the rotor coil couplings of a synchronous machine on its predicted transient response
p0632 N78-33330
NEIGHBOR, T. L.
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
NEIL, R. D.
A state-of-the-art assessment of air data sensors for Naval aircraft
[AD-A046500] p0150 N78-15038
NEILAND, V. IA.
Strong interaction of a boundary layer and a hypersonic flow in the presence of local perturbations of the boundary conditions
p0127 A78-19650
Asymptotic theory of the onset of separation at a flap on a cooled body situated in hypersonic flow under conditions of weak hypersonic interaction
p0128 A78-19671
NEINER, G. H.
Mechanical characteristics of stability-bleed valves for a supersonic inlet
[NASA-TM-X-3483] p0098 N78-13063
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control
p0605 N78-32062
NEITZEL, R. E.
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
NELMS, W. P.
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Remotely piloted aircraft in the civil environment
p0283 A78-30506
Studies of aerodynamic technology for VSTOL fighter/attack aircraft
[AIAA PAPER 78-1511] p0516 A78-47946
NELSON, J. R.
Get acquainted with scanning-beam MLS
p0416 A78-40844
Life-cycle analysis of aircraft turbine engines
[AD-A050349] p0308 N78-20135
NELSON, W.
Aircraft tracking problems from range rate 'turbine modulation'
p0063 A78-15631
NELSON, R. B.
Minimum weight design of stiffened panels with fracture constraints
p0529 A78-49837
NELSON, R. C.
The effects of atmospheric wind gradients on the motion of V/STOL aircraft near the ground
p0123 A78-19432
NELSON, R. G.
A hardware implementation of the ATCRBS reply processor used in DABS
[AD-A047622/6] p0257 N78-19090
NELSON, T. F.
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
NEMEC, C.
Air-to-air designate/track with time sharing
p0538 A78-49977
NEMEC, J.
Development of fatigue cracks in real structures - Applications to aircraft design
p0332 A78-33609
NEMADOVICH, M.
Deformation curve of rotary airfoil blades
p0386 A78-39540
NES, W. V.
Methods and results of boundary layer measurements on a glider
[NASA-TM-75294] p0394 N78-24085
NESS, W. G.
A Monte Carlo method for analyzing and enhancing flight control system survivability
p0061 A78-15564
NESTEROV, E. D.
Study of airflow into air intake with groundplane by the EGDA method
p0049 A78-13183
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime
p0187 A78-24275
NETZER, D. W.
Modeling solid-fuel ramjet combustion
p0076 A78-16709
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
A sub-scale turbojet test cell for design evaluations and analytical model validation
[AD-A049862] p0324 N78-21166
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101
NEUBAUER, M. J.
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
NEUBAUER, R.
Flowfield and pressure field of a model propeller
p0191 A78-24451
NEUBECKER, A.
Simulation tests of anti-flak profiles
p0290 A78-31951
NEULIEB, R. L.
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
NEUMANN, G.
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints
[DLR-FB-77-63] p0567 N78-31251
NEUMANN, R. D.
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
NEUSTUPA, P.
Main characteristics of the ADT 4000-4100 digital computer for a hybrid computing system
p0277 A78-29589
NEVE, R. S.
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
NEVSKII, L. B.
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Study of gas flows with shearing interferometers
p0327 A78-32622
NEWIRTH, D. M.
Fabrication and test of digital output interface devices for gas turbine electronic controls
[NASA-CR-135427] p0455 N78-27129
NEWMAN, D. T.
Design to cost/life cycle costing; Proceedings of the Conference, Washington, D.C., November 16-18, 1977
p0169 A78-21838
NEWMAN, J. C., JR.
Recent developments in analysis of crack propagation and fracture of practical materials
[NASA-TM-78766] p0556 N78-30606
NEWMAN, M. M.
Protection for aircraft
p0072 A78-16274
NEWMAN, P. A.
Numerical design of streamlined tunnel walls for a two-dimensional transonic test
[NASA-TM-78641] p0364 N78-23105
NEWMAN, R. L.
General aviation flight instrument displays
p0425 A78-42514
NEWSOME, L. D.
Fatigue crack propagation analysis of aircraft

structures
[AD-A053835] p0459 N78-27456
NEWTON, E.
Some lessons learned from aircraft accidents - The engineering aspects
p0281 A78-29936
NGUYEN, L. T.
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
Aerodynamic characteristics in ground proximity
p0390 N78-24055
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
NICE, W. O.
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
NICHOLAS, O. P.
The STO deck launch problem
p0259 N78-19107
NICHOLLS, J. A.
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
NICHOLS, M. A.
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041
NICKERSON, G. R.
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142
NICKS, O. W.
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
NICKUM, J. D.
Stand-alone development system using a KIM-1 microcomputer module
[NASA-CR-156067] p0303 N78-20100
NICOL, D. J.
Aircraft size and air transport costs
p0395 N78-24112
NICOLAS, J. J.
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
NIEDZWIECKI, R. W.
Summary of emissions reduction technology programs
p0039 N78-11071
NIEHAUS, B. P.
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
NIELSEN, J. P.
Proposed load evaluation system for U.S. Air Force
p0526 A78-49677
Methodology for determining, isolating, and correcting runway roughness
[AD-A044328/3] p0099 N78-13078
NIESSON, F. R.
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] p0210 N78-17070
NIGAM, N. C.
Optimum structural design of sheet-stringer panels subjected to jet noise excitation
p0230 A78-27887
NIISAWA, J.
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
NIJIM, H.
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
NIKOLAEV, V. S.
Experimental investigation of optimal balanced delta wings in viscous hypersonic flow
p0129 A78-19742
NIKOLITSCH, D.
Normal-force and pitching-moment coefficients of wing-body combinations at very high angles of attack
[AIAA PAPER 78-63] p0158 A78-20664
NIKOLSKII, IU. V.
Characteristics of the jet acceleration of a flow to hypersonic speeds
p0166 A78-20953
NIKONOROV, E. M.
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
NINGAIAH
Load interaction effects in fatigue crack propagation
p0555 N78-30285
NISHI, T.
Design and test of transonic airfoils under consideration of drag divergence Mach number
[AIAA PAPER 78-1221] p0424 A78-41902
NISHIDA, A.
Investigation of flow in centrifugal impeller with tandum inducer
p0577 A78-50614
NISHIJIMA, S.
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
NISHIMURA, H.
Gust response experiments of an airplane dynamic model in the NAL gust wind tunnel
p0133 A78-20374
NISHIMURA, M.
Broadband noise in axial-fan blade cascade
p0579 A78-50650
NISHIO, K.
Research and development of digital jet-engine controls
p0578 A78-50626
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
NISHIWAKI, H.
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
NISHIYAMA, T.
Unsteady dynamic responses of subsonic cascades to sinusoidal gust. III - Stator and rotor blade cascades in oscillation
p0577 A78-50617
NISHT, M. I.
A study of the influence of slits on the effectiveness of wing mechanization and controls in separated flow
p0174 A78-22647
Calculation of the aerodynamic characteristics of a wing moving with subsonic velocity under a slight effect of a shock wave
p0334 A78-34442
Influence of slots on effectiveness of wing mechanization and control surfaces with separated flow
p0518 A78-48229
NISIMURA, T.
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
NISSIM, E.
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459
NIVEN, A. J.
Heavy lift helicopter flight control system. Volume 1: Production recommendations
[AD-A050618] p0353 N78-22113
NIX, P. W.
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078
NIXON, D.
Calculation of unsteady transonic flows using the integral equation method

[AIAA PAPER 78-13] p0157 A78-20632
Notes on the transonic indicial method
p0376 A78-37732
NIYOGI, P.
Integral equation formulation for transonic lifting profiles
p0076 A78-16820
Transonic integral equation formulation for lifting profiles and wings
p0113 A78-18238
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
NOBACK, R.
A non-stationary model for atmospheric turbulence patches for the prediction of aircraft design loads
[NLR-TR-76131-U] p0361 N78-23085
NOCILLA, S.
A numerical procedure for the solution of the direct problem of supercritical transonic wing profiles, with a hodographic method
p0118 A78-19040
NOGGLE, L. W.
The military utility of very large airplanes and alternative fuels
[AD-A053604] p0487 N78-28051
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
NOLL, R. B.
Aerodynamic interference effects on tilting proprotor aircraft
[NASA-CR-152053] p0092 N78-13007
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
NOLL, T. E.
Wing/store active flutter suppression - Correlation of analyses and wind tunnel data
[AIAA PAPER 78-1459] p0511 A78-47909
Close encounters of the aeroservoelastic kind
[AIAA 78-1289] p0542 A78-50196
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128
NOLT, I. G.
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
NOMURA, M.
An experiment of deposit formation on surface of an air-cooled gas-turbine blade
p0578 A78-50634
NOONEY, J. A.
UHF demand assigned multiple access /UHF DAMA/ system for tactical satellite communications
p0226 A78-27032
NOONKESTER, R. V.
Remote sensing of aircraft wake vortex movement in the airport environment
[APCA PAPER 77-41,4] p0220 A78-25385
NORDENBERG, H. M.
The Navy's approach /Air traffic control/
p0595 A78-52969
NORDLUND, R. E.
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
NORDMARK, G. E.
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
NORED, D. L.
Propulsion
p0461 A78-43360
ACEE propulsion overview
p0446 N78-27048
Fuel conservative aircraft engine technology
[NASA-TM-78962] p0454 N78-27127
NORED, L. S.
Applications for airborne digital communications
p0590 A78-51896
NORGREN, C. T.
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
NORTH, M. K.
Current state of the law in aircraft noise pollution control
p0583 A78-51130
NORTHAM, A. M.
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
NOSICH, A. I.
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
NOUSE, H.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
NOVICK, A. S.
Numerical simulation of combustor flow fields - The development and application of a primitive variable design capability
[AIAA PAPER 78-949] p0462 A78-43514
NOVITSKII, V. V.
Contribution to the synthesis and analysis of systems of active antiflutter control of flight vehicles
p0334 A78-34305
NOWACK, C. J.
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417
NOWAK, Z.
Calculation of airfoil drag
p0369 A78-36210
NUCKOLS, J. H.
A hardware implementation of the ATCRBS reply processor used in DABS
[AD-A047622/6] p0257 N78-19090
NUEHRENBERG, J.
Ballooning stability boundaries for the large-aspect-ratio tokamak
p0599 A78-53664
NUGENT, J.
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
NUNES, J. E.
Airborne Oceanographic Lidar System
p0053 A78-14878
NURSE, R.
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
NUSBAUM, W. J.
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053
NYSTROM, P. A.
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834

O

OBERDOERSTER, H.
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives
[BMVG-FBWT-77-16] p0245 N78-18072
OBERLE, R. A.
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
OBERMEIER, F.
Some comments on sonic boom focusing
p0584 A78-51172
OBERNDORFER, R. E.
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090

OBERSON, H. J., JR.
Fracture analysis of aerospace metals
p0175 A78-22724
OBERT, E.
The supercritical wing - An evolution or a revolution
p0478 A78-45239
OBERTI, A.
Improved energy efficiency for small CTOL transport aircraft
p0286 A78-31305
OBRIEN, C. J.
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142
OBRIEN, J.
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
OBRIEN, W. L.
Low-cost composite primary structure
p0069 A78-15855
OCH, F.
Theoretical investigation on the crash behavior of cell structures
p0382 A78-38805
OCHIAI, T.
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
OCONNOR, J. C.
UTTAS testing
p0233 A78-28461
OCONNOR, M. A., JR.
Blade fragment energy analysis
p0025 N78-10074
Approaches to rotor fragment protection
p0026 N78-10076
ODELL, A. H.
Airport noise monitoring
p0341 A78-35663
ODONNELL, R. M.
The effect of correlated missed detections, correlated false alarms and interclutter visibility on the performance of an automated radar tracking system
p0374 A78-37485
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
OGAR, G. W.
Measuring and correcting for errors in an avionics radar system
p0066 A78-15666
OGAWA, T.
On the flow in a centrifugal impeller. II - Effects of change in impeller width
p0230 A78-27907
OGG, J.
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
OGREN, J. A.
Airborne sampling system for plume monitoring
p0418 A78-41280
OHLHORST, C. W.
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
OHLSON, J.
Flight testing an 8000 psi Lightweight Hydraulic System
[SAE PAPER 771007] p0181 A78-23839
OHMAN, L. H.
A major refurbishing program for the NAE 5-ft. x 5-ft. blowdown wind tunnel
p0415 A78-40725
OKANO, H.
The development of a regenerator seal for vehicular use
p0574 A78-50587
OKIISHI, T. H.
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118
OKUBO, H.
An application of stochastic control theory to the gust-alleviation system for a transport airplane
p0071 A78-16179
OKUNEV, S. N.
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
OLHAUSEN, J. N.
F-16 progress in performance flight testing using an inertial navigation unit
p0123 A78-19427
OLIVER, A. R.
The next approximation after boundary layer theory
p0373 A78-37409
OLIVER, B. M.
Use of an inertial navigation system for accurate track recovery and coastal oceanographic measurements
p0053 A78-14892
OLIVER, J. D.
Safe air-space requirements above an explosive-ordnance test facility
[NRL-R-711] p0451 N78-27092
OLIVER, R. C.
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
OLIVI, A.
The evolution of the gamma prime phase in aircraft turbine blades of Inconel 700
p0118 A78-19035
OLKHOVSKAIA, N. I.
Investigating the efficiency of gas turbines in off-design operation
p0377 A78-37860
OLKHOVSKII, G. G.
Investigating the efficiency of gas turbines in off-design operation
p0377 A78-37860
OLLERHEAD, J. B.
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport
[TT-7705] p0556 N78-30910
A comparison of annoyance caused by aircraft noise near London, Manchester and Liverpool airports
[TT-7706] p0557 N78-30911
OLSEN, A. K.
Engineering methods in engine management
p0112 A78-18021
OLSEN, J. J.
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
OLSEN, N. L.
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
The use of transient testing techniques in the Boeing YC-14 flutter clearance program
[AIAA 78-505] p0279 A78-29806
OLSON, L. E.
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
OLSON, S. R.
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
OLTHOF, H.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
OMAHONEY, R.
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
OMAN, B. H.
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
OMELCHUK, N. D.
Some problems of heat transfer in a boundary layer on continuously moving axisymmetric surfaces
p0598 A78-53309
OMELIK, A. I.
Simulation of the flight conditions in the ionosphere
p0165 A78-20915

Measurement of momentum transport to surfaces of different form in a hypersonic free-molecular stream
p0335 A78-34448
ONSTOTT, E. D.
Discrete maneuver pilot models for flying qualities evaluation
p0226 A78-26791
ONTIVEROS, B. J.
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
OPDYKE, G., JR.
Variability of emissions measurements on a small gas turbine engine
p0572 A78-50569
OPPENHEIM, A. K.
Laboratory studies of lean combustion
p0040 N78-11079
ORENTAS, A. A.
EAR navigation update modes
p0066 A78-15667
ORLANSKY, J.
Cost-effectiveness of flight simulators for military training. Volume 1: Use and effectiveness of flight simulators
[AD-A052801] p0400 N78-24156
ORLICK, S. C.
Airport/community environmental planning
p0284 A78-30678
ORLIK-RUECKEMANN, K. J.
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121
ORLOFF, G.
A high-frequency reverse-flow fluidic self-cleaning fuel filter
p0134 A78-20523
ORLOFF, K. L.
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Application of laser velocimetry to aircraft wake-vortex measurements
p0080 N78-12021
Laser-velocimeter surveys of merging vortices in a wind tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043
ORLOV, V. V.
Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle engines
p0599 A78-53511
ORLOVA, N. M.
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
ORLOVSKAIA, E. KH.
Flow visualization in the region of intersection of aerodynamic surfaces
p0166 A78-20951
ORMSBEE, A. I.
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
ORMSBY, C. C.
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
ORR, B.
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
ORRINGER, O.
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
ORVOS, P. S.
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
OSBORN, R. F., JR.
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
OSBORN, W. H.
Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107
OSIPOV, V. A.
Automated channel and trough-shaped surface design system algorithm
p0049 A78-13174
Analysis and calculation of plane skew symmetric contours of second-order smoothness
p0174 A78-22636
OSMUN, W. G.
Airline contributions to better air traffic control
p0587 A78-51518
OSOKIN, IU. A.
Gyroscopic instruments of orientation and stabilization systems
p0280 A78-29859
OSTAPENKO, N. A.
Hypersonic flow past a conical wing with detached shock wave at the leading edges
p0169 A78-22078
OSTAPKOWICZ, M.
Endurance testing of turbine-engine bearings in a test bed
p0327 A78-32648
Operation of oil seales of aircraft piston engines under conditions of cavitation. I
p0507 A78-47175
OSTDIEK, F. R.
A cascade in unsteady flow
[AD-A045319] p0091 N78-12381
OSTERRATH, H.
Data acquisition in the case of a jet-engine test stand
p0335 A78-34488
OSTGAARD, M. A.
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
OSTOPKOWICZ, M.
Operation of oil ring seals for aircraft turbine engines under cavitation conditions. II
p0588 A78-51600
OSTROM, R. B.
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
OSTROWSKI, J.
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
OSWATITSCH, K.
Special areas of gas dynamics: Sonic, hypersonic, lifting surfaces, wave propagation
p0175 A78-22937
OTANI, T.
The development of a regenerator seal for vehicular use
p0574 A78-50587
OTSUKA, S.
Radial equilibrium of flows in shock-in-rotor type rotors
p0576 A78-50611
OTTENHOFF, C.
Analog versus digital null-steering controllers
p0227 A78-27039
OTTENSOSER, J.
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
OUSTERHOUT, D. S.
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
OWCZARSKI, W. A.
Process and metallurgical factors in joining superalloys and other high service temperature materials
p0046 N78-11393

OWEN, C. K.
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096
OWEN, F. K.
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
OWENS, P. R.
Avionics maintenance study
[AD-A042568] p0017 N78-10003

P

PAAS, J. E.
CF6 jet engine performance deterioration results
p0446 N78-27049
PACE, R. G.
Aircraft emission factors
[PB-275067/7] p0250 N78-18595
PACE, W. A.
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064
PACKMAN, A. B.
Flight effects on the aerodynamic and acoustic characteristics of inverted profile coannular nozzles
[NASA-CR-3018] p0621 N78-32836
PADIYAR, K. S.
A case for a new model for turbulent flame propagation
p0229 A78-27840
PAGE, R. H.
The turbulent flow through a sudden enlargement at subsonic speeds
p0374 A78-37413
PAGEL, L. L.
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
PAHNICHAPUTT, W.
Analysis of a high speed ring valve system for a single cylinder reciprocating compressor
p0633 N78-33442
PAINTER, J. H.
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
PAKHOLKOV, G. A.
Electronic aircraft collision avoidance system
p0376 A78-37603
PALATUCCI, G. J.
TIES - Tactical information exchange system
[AIAA 77-1498] p0006 A78-12246
PALAZOTTO, A. N.
Cutout reinforcement of stiffened cylindrical shells
[AIAA 78-512] p0279 A78-29811
PALFREEMAN, B. J.
Aircraft fuel economy - The propulsion system contribution
p0287 A78-31309
PALKO, R. L.
A constant aerodynamic parameter testing technique with automatic wind tunnel control
[AIAA 78-784] p0295 A78-32342
Semispan wind tunnel test of a computer-controlled self-optimizing flexible technology wing
[AIAA 78-786] p0295 A78-32344
PALMER, G. M.
General aviation flight instrument displays
p0425 A78-42514
PALMER, K. P.
High temperature elastomers in gas turbine engine fuel sealing
p0593 A78-52686
Double row radial hydraulic piston pumps for aircraft hydraulic systems
p0598 A78-53249
PALMER, P.
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
PANCHENKO, I. N.
Upgrading the carrying capacity of stretched panels with a stress-raiser rib by the technique of strain-compensating holes
p0166 A78-20918
PANCHENKO, O. M.
An approximate method of calculating downwash behind a straight wing with unsteady aperiodic motion at subsonic flight speeds
[AD-A044293] p0084 N78-12069
PANCHENKOV, A. N.
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
PANCHISHIN, V. I.
Description of transient motion of aviation mechanisms with double-winding electromagnetic clutches
p0220 A78-25584
PANDOLFI, M.
Axisymmetric flow in nozzles with or without vortices
p0121 A78-19079
PANKRATOV, B. M.
Some aspects of the thermal design of flight vehicles and processing of heat-test data
p0228 A78-27452
PANTASON, P.
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
PANUNZIO, S.
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372
PAO, J. L.
Minimum induced drag configurations with jet interaction
[NASA-CR-145344] p0204 N78-17002
PAPADALES, B. S., JR.
Ride characteristics of catamaran sea loiter aircraft in a seaway
[AD-A045363] p0096 N78-13048
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
The performance of a conceptual multimission power-augmented-ram wing-in-ground effect vehicle
[AD-A051433] p0359 N78-23064
PAPAILIOU, K. D.
Technical evaluation report on the 49th(A) Propulsion and Energetics Panel Specialists' Meeting on Secondary Flows in turbomachines
[AGARD-AR-109] p0142 N78-14052
PAPENFUSS, H. D.
Second-order boundary-layer flow with hard suction
p0076 A78-16812
PAPIRNIK, O.
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
PAPKE, N. L.
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
PAPPAS, M. S.
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052
PAPROCKI, C.
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
PARADIS, A. R.
L-band air-to-air multipath measurements
[AD-A045941] p0144 N78-14212
PARASCHIVOIU, I.
Pressure distribution on a symmetrical butterfly wing
p0415 A78-40799
PARASIUK, V. I.
Computer-aided statistical analysis of the stress-strain state of load-carrying structures
p0131 A78-20267
PARCELIER, P.
Results of laser synchronization by overflight between Paris and San Fernando in Spain
[ONERA, TP NO. 1978-40] p0479 A78-45277
PARIS, D. S.
Some formulation considerations in 3D transonic flow computation

p0010 A78-12291
PARK, C. H.
A tandem-queue algorithm for evaluating overall airport capacity
p0202 N78-16741
PARK, C.-H.
Tandem-queue algorithm for airport user flows
p0284 A78-30677
PARK, H. K.
New materials in the Si-C-Al-O-N and related systems
p0601 A78-53864
PARK, P. H.
The effect on block fuel consumption of a strutted versus cantilever wing for a short-haul transport including strut aeroelastic considerations
[AIAA PAPER 78-1454] p0511 A78-47905
PARK, S.
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
PARKE, N. L.
Sensitivity of the Shoe-Box in P001 analysis
[AD-A043707] p0038 N78-11055
PARKER, C. D.
General aviation avionics equipment maintenance
[NASA-CR-145342] p0398 N78-24132
PARKER, D. E.
Low-cost composite primary structure
p0069 A78-15855
PARKER, D. L.
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
PARKER, G. S.
Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
PARKER, J. A.
ALC/50/ values for some polymeric materials
p0371 A78-36596
The relative fire resistance of select thermoplastic materials
p0480 A78-45475
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0526 A78-49693
Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-2] p0457 N78-27184
PARKER, L. C.
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
PARKER, R. D.
Capacitors for aircraft high power
[AD-A046340] p0151 N78-15052
PARKER, R. J.
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
PARKER, W. H.
DSTR/501-M62B dynamic interface critical speed problem
[AD-A042441] p0042 N78-11108
PARKINSON, D. B.
Exploratory development of conductive coating materials
[AD-A048253] p0247 N78-18138
PARKS, E. K.
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
PARRA, G. T.
Angle detector
[NASA-CASE-ARC-11036-1] p0616 N78-32395
PARRAVANO, G. J.
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029
PARRISH, R. V.
Effect of digitally computed drives on performance of continuous linear systems
[NASA-TN-D-8518] p0022 N78-10045
PARSONS, L. D.
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
PARTHASARATHY, S. P.
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
PASZTOR, E.
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
PATCHING, C. A.
Structural fatigue testing
p0554 N78-30279
PATEL, M. H.
On the linear superposition of aerodynamic forces on wings in periodic gusts
p0510 A78-47869
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037
PATEL, M. P.
Dynamic analysis using superelements for a large helicopter model
p0617 N78-32486
PATEL, P. D.
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
PATEL, R. V.
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0114 A78-18464
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0184 A78-23917
PATERSON, J. A.
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133
PATIL, P. B.
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
Combustion and emission characteristics of a gas turbine combustor
p0610 N78-32095
PATTERSON, J. C., JR.
Thrust-augmented vortex attenuation
p0080 N78-12024
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
PATTERSON, J. H., JR.
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
PATTERSON, J. L.
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
PATTERSON, W. J.
F-4E fire control system simulator, F-4E austere/heads up display (HUD), SEAPAC programs
[AD-A042255] p0031 N78-10124
PATTON, J. H., JR.
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
PATURSKI, Z.
Lateral stability of a light aircraft during landing
p0167 A78-21020
PAULOVICH, F. J.
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
PAULSON, J. W., JR.
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration

[NASA-TP-1090] p0092 N78-13014
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
PAVLENKO, G. V.
Determination of the type of rotating stall in an axial compressor stage
p0131 A78-20255
Influence of changes in bypass ratio on the aerodynamic behavior of a fan
p0581 A78-50794
PAVLOVSKII, N. I.
Aircraft auxiliary power units
p0377 A78-37885
PAVLOVSKII, V. P.
Unsteady fluid flow in a swirl injector
p0581 A78-50781
PAWLAK, R. J.
Inertially-aided, all-weather landing systems for C/TOL
p0356 N78-23017
PAYNE, A. O.
Current developments in the life of aircraft structure
p0554 N78-30280
PAYNE, P. R.
The theory of fabric porosity as applied to parachutes in incompressible flow
p0586 A78-51466
Development of an ultra high level airdrop container concept
[AD-A046156] p0138 N78-14017
PAYNTER, G. C.
An experimental and numerical study of three-dimensional turbulent jets
[AIAA PAPER 78-994] p0520 A78-48471
PCHELKIN, IU. M.
Calculation of combustion efficiency in gas-turbine-engine combustion chambers
p0588 A78-51670
PEACE, M. A.
Some operational experience of Concorde weight and balance
p0110 A78-17892
PEAKE, D. J.
Phenomenological aspects of quasi-stationary controlled and uncontrolled three-dimensional flow separations
p0493 N78-28402
PEARCE, W. E.
Application of porous materials for laminar flow control
p0449 N78-27072
PEARLMAN, R. A.
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 1: Validation and sensitivity study
[AD-A045034] p0085 N78-12077
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 2: Interpretation of the integrated margin
[AD-A045035] p0086 N78-12078
PEARSON, J.
Vibration control of optical packages in aircraft
p0063 A78-15594
PEARSON, R. J.
Monitoring airline performance
p0332 A78-33587
PECH, R.
In-state delivery and reinforcement of rigid airport causeways - Some technical problems and attempts using special coatings
p0188 A78-24375
PECK, K. I.
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
PECK, P. E.
Rolls-Royce RB401 turbofan - A new business jet engine for the 1980's
p0375 A78-37538
PEDDIESON, J., JR.
Mathematical analysis of impact erosion
p0588 A78-51711
PEDLEY, B.
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
PEGG, R. J.
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise
p0620 N78-32827
PEHR, P. J.
Helicopter TF radar Pavelow III
p0068 A78-15697
PEIKO, IA. N.
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
PEITILA, R.
Aircraft attitude measurement using a vector magnetometer
[NASA-CR-155565] p0207 N78-17050
PEITZMAN, F. W.
Determination of high attitude wall corrections in a low speed wind tunnel
[AIAA 78-810] p0296 A78-32364
PELED, U.
The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
PELEGRIN, M.
Accurate timing in landings through air traffic control
p0433 N78-26067
PELLEGRINI, H. V.
Selecting plastics for aircraft applications
p0232 A78-28374
PELPOR, D. S.
Gyroscopic instruments of orientation and stabilization systems
p0280 A78-29859
PELTON, E. L.
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
PENA, D. F.
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
PENDERGRAFT, O. C., JR.
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
PENIA, B. N.
Nonlinear vibrations of an asymmetric flight vehicle
p0599 A78-53504
PENLAND, J. A.
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
PENNOCK, A. P.
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
PENNY, M. M.
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134
PENTIUKHOV, V. I.
Aircraft takeoff from dirt airstrips
p0293 A78-32273
PENWELL, R.
Computer Monitor and Control /CMAC/ - A real time systems window
p0064 A78-15637
PERDUE, E. M.
Dual band airborne SATCOM terminal
p0537 A78-49972
PERDZOCK, J. M.
Multi-Function Inertial Reference Assembly /MIRA/ update
p0535 A78-49941
PEREPUKHOV, V. A.
Calculation of the flow of a rarefied gas past a plate of infinite span
p0164 A78-20857

PEREVERZEV, E. S.
Problems of rating the life of aircraft design elements in random loading
p0133 A78-20402
PEREVERZEV, V. G.
Theoretical study of the thermal regime of noncooled combustion chambers of flight vehicle engines
p0599 A78-53511
PERGAMENT, H. S.
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
PERIE, M. E.
Project Plan: Tower automated ground surveillance system development program
[AD-A051621] p0400 N78-24155
Airport Surface Detection Equipment (ASDE-3) project plan
[AD-A052362] p0457 N78-27144
PERKIN, B. R.
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
PERKINS, J. N.
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
PERKINS, J. R.
Overview of the advanced aircraft electrical system /AAES/ A-7E prototype design
p0061 A78-15573
Electrical load management for advanced aircraft electrical systems
p0062 A78-15575
Cost-effective built-in test for advanced aircraft electrical systems
[AIAA PAPER 76-945] p0071 A78-16183
Application of the General Purpose Multiplex System to the A-7E avionics
p0532 A78-49867
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
PERKINS, P. J.
Global atmospheric sampling program
p0040 N78-11076
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates Learjet business jet
[NASA-TM-78983] p0558 N78-31061
Ozone concentration in the cabin of a Gates Learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618
PERMINOV, V. D.
A formulation of the problem of the minimum-drag wing
p0164 A78-20867
PEROUZE, C.
Operational two-dimensional laser velocimeter for various wind tunnel measurements
[ONERA, TP NO. 1978-74] p0479 A78-45276
PERRELLA, W. M., JR.
Tests of crash-resistant fuel system for general aviation
[AD-A054141] p0490 N78-28081
PERRIER, P.
Separation problems encountered by aircraft designers CSS Div. des Etudes Avancees.
p0249 N78-18377
Boundary separation problems faced by aircraft designers
p0493 N78-28399
PERRY, A. E.
The time response of an aspirating probe in gas sampling
p0001 A78-10600
PERRY, B., III
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
Control-surface hinge-moment calculations for a high-aspect-ratio supercritical wing
[NASA-TM-78664] p0557 N78-31043
PERSON, L. H., JR.
Terminal-area flight experience with the NASA Terminal Configured Vehicle
p0291 A78-31972
PERSOON, A. J.
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
PERVAK, V. D.
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
PETER, K. F.
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
PETERS, J. M.
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
PETERS, L., JR.
Surface current and charge density induced on aircraft
p0169 A78-21990
PETERSEN, F. S.
Facing up to the military V/STOL challenge
p0016 A78-13070
PETERSEN, R. H.
How good is jet lift VTOL technology
p0076 A78-16696
PETERSON, C. W.
A computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[AIAA 78-785] p0295 A78-32343
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
PETERSON, J. B.
Microprocessor realization of the bus interface unit for a distributed avionic computer system
p0066 A78-15661
PETERSON, J. B., JR.
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
PETERSON, M. B.
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-IC-6B-2] p0232 A78-28439
PETERSON, V. L.
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
PETIT, G.
Helicopters and energy savings
p0056 A78-15020
Helicopters and energy savings
[AAAF-NT-77-25] p0397 N78-24128
PETIT, J. E.
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
PETRASEK, D. W.
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
PETRASH, D. A.
Gas turbine engine emission reduction technology program
p0447 N78-27058
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
PETRENKO, A. I.
Investigation of turbine blade endurance during thermal cycling and vibration in a gas stream
p0001 A78-10267
PETRIE, J. A. H.
Chordwise variation of vorticity - A comparison of approximations for use in panel methods
p0130 A78-20194
PETRIE, S. L.
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089

PETRINO, E. A.
Low frequency combustion instability in augmentors
p0321 N78-21138
PETROFF, D. N.
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
PETRUSHKA, E. M.
Application of the thrust augmentation wing principle for potential military use
p0110 A78-17893
PETTIGREW, J. L.
TF-30-P-7 installed trim correction
[AD-A047023] p0199 N78-16058
PETTIT, D.
Application of fracture mechanics data to aerospace design
p0050 A78-13414
PETTIT, D. E.
A close look at 7475 and 2024 aluminum for aircraft structures
p0108 A78-17699
PETTY, J. S.
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
PETYT, M.
Finite strip analysis of flat skin-stringer structures
p0070 A78-16023
PEUKER, G.
Precise enroute navigation based on ground-derived techniques
p0315 N78-21078
PFAFF, K.
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
PFEFFERLE, W. C.
The catalytic combustor - An approach to cleaner combustion
p0416 A78-40820
PFEIFER, G. D.
Engineering summary of powerplant icing technical data
[AD-A045087] p0087 N78-12087
PFIZENMAIER, E.
Reducing aircraft noise through retrofitting
[DGLR PAPER 77-047] p0190 A78-24436
Recent advances concerning an understanding of sound transmission through engine nozzles and jets
[DGLR PAPER 77-048] p0191 A78-24437
PHELPS, A. E., III
Upper-surface-blowing flow-turning performance
p0389 N78-24048
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage
[NASA-TM-74033] p0604 N78-32049
PHILIPPE, J. J.
ONERA aerodynamic research work on helicopters
p0264 N78-19148
Dynamic stall: An example of strong interaction between viscous and inviscid flows
[NASA-TM-75447] p0615 N78-32384
PHILLIPS, L. W.
Quiet revolution - An update on carbon fibres for aircraft structures
p0070 A78-15952
PHILLIPS, P. H.
Applications for airborne digital communications
p0590 A78-51896
PHILLIPS, W. H.
Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115
Simulation study of the oscillatory longitudinal motion of an airplane at the stall
[NASA-TP-1242] p0552 N78-30141
PI, W. S.
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
A non-Gaussian gust model for aircraft response analysis
[NOR-76-223] p0265 N78-19165
PIANKO, M.
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145
PICARDI, R.
Some aspects of the problem of flights in ascent
p0119 A78-19041
PICKEL, F. E.
A multi-sensor implementation for navigation, position location, position update, reconnaissance, and weapon delivery: AN/ARN-101(V)
p0315 N78-21082
PICKETT, G. F.
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
PIERATT, D. E.
B-1 Central Integrated Test System /CITS/
[AIAA 77-1502] p0009 A78-12280
PIERCE, A. D.
Aircraft noise propagation
p0445 N78-26879
PIERCE, B. L.
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
PIERCE, H.
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
PIERCY, J. E.
Prediction of the ground effect - Side-line noise from aircraft
p0375 A78-37530
PIERZGA, M. J.
A solution to the direct problem of an open propeller using the streamline curvature method
[AIAA PAPER 78-310] p0185 A78-24011
PIESINGER, G. H.
Active reference null steering for spread spectrum signals
p0226 A78-27038
PIETERSEN, O. B. M.
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
PIETRUCHA, J.
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
PIFER, B.
Aircraft Satellite Data Link
p0338 A78-34971
PIKE, G. H. S.
The computation of the unsteady aerodynamics of bodies near a ground surface
p0373 A78-37408
PILIUGIN, N. N.
Measurement of the flow behind a hypersonic sphere in air, using open microwave resonators
p0586 A78-51449
PILKEY, W. D.
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
PILNIK, A. F.
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
PINN, J. H.
Experimental investigation of composite wing failure
[AIAA 78-509] p0279 A78-29809

PINCHUK, D. A.
Experimental method of determining the elastic characteristics of flight vehicles
p0131 A78-20264
PINCKNEY, S. Z.
Internal performance predictions for Langley scramjet engine module
[NASA-TM-X-74038] p0208 N78-17057
Rectangular capture area to circular combustor scramjet engine
[NASA-TM-78657] p0318 N78-21107
PINES, S.
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
PIOTROWSKI, E.
Analysis of lateral dynamic stability of an airplane with deformable control systems. II - Numerical analysis
p0108 A78-17642
PITTMAN, J. L.
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
PITTMAN, R.
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120
PITTS, J. I.
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050
PITZ, R. W.
Laboratory studies of lean combustion
p0040 N78-11079
PIVKO, S.
Experimental verification of an annular aerofoil theory
p0230 A78-27938
Aerodynamics of the annular wing
p0379 A78-38475
PIZZI, P.
Application of small-angle neutron scattering to NDI of materials and manufactured components
p0443 N78-26465
PLAKHOVA, I. I.
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime
p0187 A78-24275
PLANK, V. G.
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
PLATT, C. E.
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
PLATZ, K.
Improved safety in air transportation through the extension and automation of flight safety systems
p0569 A78-50264
Concept and future plans for automation of air traffic control in the Federal Republic of Germany
p0596 A78-52972
PLATZER, M. F.
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
PLATZOEDER, L.
Digital computer program maneuver pilot
p0290 A78-31946
Improvement of flight measuring data with a Kalman filter
[BMVG-FBWT-77-6] p0243 N78-18057
PLEE, S. L.
Review of flashback reported in prevaporizing/premixing combustors
p0377 A78-37772
Flame stabilization in simplified prevaporizing, partially vaporizing and conventional gas turbine combustors
[AIAA PAPER 78-1038] p0465 A78-43566
PLESS, W. M.
Acoustic emission detection of fatigue crack growth in a production-size aircraft wing test article under simulated flight loads
p0288 A78-31733
PLETSCHACHER, P.
Dornier LSK - Light combat aircraft with hover capability for anti-tank missions and shipboard deployment
p0336 A78-34822
PLISOV, N. B.
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
PLOCHER, D. A.
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
PLOTKIN, A.
High-frequency approximation for a nonlifting thin airfoil in subsonic flow
[AIAA PAPER 78-226] p0161 A78-20755
High-frequency subsonic flow past a pulsating thin airfoil. II - Gust-type upwash
p0416 A78-40837
Unsteady transonic thin-airfoil theory for power-law upwash
p0418 A78-41146
PLUMER, J. A.
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
PLUMEYER, P.
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106
Design of a collision avoidance system model with statistical interrogation
p0304 N78-20107
PLUMMER, C. A., JR.
YAV-8B/AV-8B advanced Harrier program
p0233 A78-28455
PODVIDZ, G. L.
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
POE, B.
Tomorrow's tanker
p0077 A78-17099
POE, C. C., JR.
Recent developments in analysis of crack propagation and fracture of practical materials
[NASA-TM-78766] p0556 N78-30606
POGUST, F.
Microwave landing systems
p0275 A78-29221
POGUST, F. B.
Whither MLS
p0281 A78-30096
POISSON-QUINTON, P.
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Evolution of aircraft design through the CCV concept
p0416 A78-40868
Prediction of aerodynamic characteristics of an aircraft from a correlation of results on a calibration model tested in various large transonic tunnels
p0436 N78-26088
POKHVALNOVA, E. E.
Aerodynamic characteristics of a small-aspect-ratio rectangular wing with tip fins at subsonic speeds
p0131 A78-20251

POKROVSKIY, B.
Earth-to-orbital station radio bridge
p0621 N78-33019
POLASEK, J.
Airfoil profile in a nonuniform flow
[NASA-TM-75272] p0312 N78-21048
POLDERVAART, L. J.
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
POLEVICHEK, E. P.
Mathematical model of the combustion-chamber filling process in a pulsating jet engine
p0131 A78-20253
Simplified theoretical model of combustion in the chamber of a pulsed jet engine
p0132 A78-20279
POLHEMUS, W. L.
The integration of helmet mounted sight and display systems with automated target handoff technology
p0066 A78-15668
POLIAKHOV, N. N.
Solution of an integral equation describing the flow past a lifting surface
p0343 A78-35968
POLIAKOV, A. F.
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
POLIAKOV, V. V.
Calculations of flows in flat asymmetric nozzles for overexpanded conditions
p0581 A78-50782
POLIAKOVA, A. V.
Experimental investigation of gas flows in the perforated test section of a transonic effuser-induction wind tunnel
p0129 A78-19741
POLITO, L.
Numerical solution of the integral equation of a subsonic lifting surface
p0120 A78-19071
The aerodynamic design of cascade airfoils - A new exact method based on conformal mapping
p0121 A78-19072
POLL, D. I. A.
Leading edge transition on swept wings
p0144 N78-14336
POLLARD, G. D.
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046
POLLOCK, K. S.
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
POLLOCK, N.
Transonic wind tunnel tests on a NACA 0012 aerofoil
[ARL/AERO-REPT-149] p0437 N78-26095
POLYAKOV, N. F.
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
PONCHEL, B. M.
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344
PONINSKI, W.
Epoxy and polyurethane paint compositions for agricultural airplanes
[AD-A045914] p0144 N78-14173
PONOMAREV, A. T.
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
PONOMAREV, IU. V.
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
PONOMAREV, L. I.
Current and scattering field of a long short-circuited receiving vibrator
p0339 A78-35467
PONTRIAGIN, L. S.
Optimization and differential games
p0592 A78-52401
POOLE, W.
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436
POP, H. G.
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478
POPE, J. C.
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718
POPE, R. G., JR.
Analysis and design of a cooled supercritical airfoil test model
[AD-A048895] p0265 N78-19168
POPE, T. C.
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
POPGOSHEV, D.
Effectiveness of the real time ferrograph and other oil monitors as related to oil filtration
[AD-A049334] p0308 N78-20134
POPOV, B. G.
Intensification of fuel evaporation in aircraft gas-turbine engines as a result of electric forces
p0582 A78-50798
POPOV, F. D.
Calculation of the three-dimensional supersonic viscous heat-conducting gas flow past blunted bodies
p0186 A78-24096
Calculation of viscous radiant gas flows
p0599 A78-53556
POPOV, M. A.
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
POPPOFF, I. G.
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
PORTER, B.
Synthesis of digital flight control systems by the method of entire eigenstructure assignment
p0531 A78-49864
PORTER, D. R.
An airplane fiber optic multiplex data bus design and feasibility demonstration system
[AIAA 77-1475] p0005 A78-12232
PORTER, J. W.
A preliminary wind tunnel investigation of the aerodynamic characteristics of a simplified lift plus lift-cruise strike aircraft model in the V/STOL flight regime
p0114 A78-18427
PORTER, R. F.
Analytical study of a free-wing/free-trimmer concept
[NASA-CR-2946] p0236 N78-18000
PORTNOY, H.
Thick, two-dimensional wake roll-up behind a wing of finite span - Extended calculations
p0078 A78-17131
POSEY, D. L.
Static pressure orifice system testing and apparatus
[NASA-CASE-LAR-12269-1] p0630 N78-33123
POSEY, J. W.
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
POST, R. J.
Braiding composites - Adapting the process for the mass production of aerospace components
p0077 A78-16904
POSTON, A. M.
The effects of eliminating minor graduations on dial reading performance
[AD-A046709] p0150 N78-15039
POTONIDES, H. C.
Design and experimental studies of a type 'A' V/STOL inlet
[AIAA PAPER 78-956] p0463 A78-43519
POTTER, E. F., JR.
Visually Activated Switching System
p0067 A78-15669
POTTER, J. L.
Computational aerodynamics requirements in conjunction with experimental facilities
p0269 N78-19788
POUILLOT, M.
Mixed ventilated foils

p0286 A78-31127
POUPARD, R.
Fault tolerant flight controls
p0274 A78-28900
POWELL, C. A., JR.
A subjective field study of helicopter blade-slap noise
[NASA-TM-78758] p0494 N78-28680
Laboratory and community studies of aircraft noise effects
[NASA-TM-78776] p0618 N78-32815
Annoyance due to the interaction of community noise sources
p0634 N78-33613
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873
POWELL, J. D.
The effect of prefilter design on sample rate selection in digital flight control systems
[AIAA 78-1308] p0542 A78-50209
POWELL, R. B.
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
POWELL, R. G.
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
USAF bioenvironmental noise data handbook. Volume 83: KC-135A aircraft, near and far-field noise
[AD-A054138] p0495 N78-28893
POWER, J. L.
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
POWERS, B. G.
Phugoid characteristics of a YF-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Analytical study of ride smoothing benefits of control system configurations optimized for pilot handling qualities
[NASA-TP-1148] p0246 N78-18076
POWERS, S. G.
Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and comparison with other data
[NASA-TM-72855] p0405 N78-25055
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
POYNEER, R. D.
Fault tolerant digital flight control using analytical redundancy
p0061 A78-15565
Sensor failure detection using analytical redundancy
p0182 A78-23862
PRABHAKAR, A.
Stability of a helicopter carrying an underslung load
p0524 A78-49398
PRASAD, A.
Effect of temperature-dependent heat capacity on aerodynamic ablation of melting bodies
p0571 A78-50455
PRASAD, S.
Three-dimensional analysis of flow in axial flow turbomachines
p0122 A78-19228
PRATT, R. M.
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
PREIS, J. G., JR.
EMC analysis of the proposed AEROSAT VHF subsystem with current inband communications systems. Volume 2: Worldwide
[AD-A043904] p0090 N78-12281
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297
PREISEL, J. H., JR.
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
PRESLEY, L. L.
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
PRESLEY, L. S.
High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft
[NASA-TM-78530] p0603 N78-32044
PRESZ, W. M., JR.
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
PRICE, E. A., JR.
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
A parametric investigation of the annular jet concept for obtaining afterbody drag data at transonic Mach numbers
[AD-A050891] p0345 N78-22032
PRICE, J. E.
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
PRICE, J. L.
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
PRICE, W. G.
Douglas Aircraft Company laser tracker
p0124 A78-19436
PRICKETT, R. J.
High performance antenna assembly
p0062 A78-15588
PRIDE, J. D., JR.
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
PRIDE, R. A.
Environmental effects on composites for aircraft
[NASA-TM-78716] p0410 N78-25135
Environmental effects on composites for aircraft
p0448 N78-27061
PRIEM, R. J.
Emissions control for ground power gas turbines
p0039 N78-11072
PRIGODA, B. A.
Antenna fairings for flight vehicles /2nd revised and enlarged edition/
p0598 A78-53426
PRINN, R. G.
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
PRIVEZENTSEVA, G. V.
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
PROCTOR, D. K.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
PROKOPOVICH, V. G.
Operation of an axial-flow compressor in the case of radially nonuniform inlet flow
p0581 A78-50793
PROSSER, C. F.
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
PROTOPAPA, S.
Air traffic control experimentation and evaluation

with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
PROUHET, E. P.
High acceleration cockpit simulator evaluation
[AD-A045165] p0100 N78-13081
PROVINES, W. P.
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
PRUST, H. W., JR.
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
PRZIBILLA, H.
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
PRZYJEMSKI, J. M.
Limitations on GPS receiver performance imposed by crystal-oscillator g-sensitivity
p0062 A78-15591
A compensation technique for acceleration-induced frequency changes in crystal oscillators
p0530 A78-49859
PUCCINELLI, L.
A program for the interactive design of wing structures
p0120 A78-19063
Applications of variational techniques to non-linear problems in panel mechanics
p0336 A78-34672
PUFFERT, W.
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
Description of the new regulating valve for the transonic supersonic wind tunnel
[DLR-IB-151-76/6] p0044 N78-11130
PUGACHEV, A.I.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
PULLEY, J. K.
Preliminary design of low-cost titanium structure
[AD-A053327] p0408 N78-25087
PURDY, W. H.
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
PURSEL, R. H.
Integration, installation, and flight test of a fail passive digital automatic flight control system in a jet transport aircraft
[AIAA 77-1514] p0008 A78-12259
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators
[AD-A049277] p0257 N78-19089
PURTELL, J. A.
US Navy/Marine Corps rotary wing requirements
p0262 N78-19132
PURVIS, J. W.
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094
PUTILIN, S. I.
Movement of a wing with a small aspect ratio near the interface of fluids with different densities
[AD-A045921] p0145 N78-14348
PUTMAN, W. P.
Aerodynamic and hovering control of LTA vehicles
[AD-A045315] p0082 N78-12047
An experimental and analytical investigation of the hovering and forward flight characteristics of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075
PUTNAM, L. E.
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
PUTNAM, R. H.
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
PUTNAM, W. F.
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle
[PB-277674] p0395 N78-24099
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091

Q

QUARANTA, M.
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
QUARTERO, C. B.
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
QUEIJO, M. J.
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
QUEMARD, C.
The induction driven tunnel T2 at ONERA-CERT - Flow qualities, testing techniques and examples of results
[AIAA 78-767] p0294 A78-32328
QUIGLEY, H. C.
Lift/cruise fan VTOL aircraft
p0076 A78-16695
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
QUINN, B.
Trends and research opportunities in airbreathing propulsion
[AIAA PAPER 78-44] p0157 A78-20652
QUINN, G. F.
Effect of performance objectives on the design and cost of future USAF pilot training aircraft
[AIAA PAPER 78-1498] p0515 A78-47938
QUINN, R. D.
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0
p0606 N78-32065

R

RAAB, F. H.
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
Omega ambiguity resolution techniques
p0111 A78-17913

RABORSHCHUK, A. S.
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
RACE, K. B.
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089
RACHOWITZ, B. I.
Designing to cost /DTC/LCC/
p0110 A78-17894
RACZ, E.
Ground and near-ground maneuvers of aircrafts with minimal exhaust emission
p0328 A78-32810
RADCHENKO, A. I.
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
RADCHENKO, E. D.
Increasing the resources of jet fuels
p0003 A78-11699
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
RADFORD, R. C.
An experimental investigation of control-display requirements for a jet-lift VTOL aircraft in the terminal area
[AIAA 78-1363] p0484 A78-46552
RADGOWSKI, E.
Investigation of electrostatic discharge in aircraft fuel tanks during refueling
[AIAA PAPER 78-1501] p0516 A78-47941
RADOSTITZ, J. V.
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
RADOVCICH, N. A.
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
RAE, W. H., JR.
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
RAE, W. J.
Finite-difference calculations of three-dimensional transonic flow through a compressor blade row, using the small-disturbance nonlinear potential equations
p0011 A78-12298
Computer program for relaxation solutions of the nonlinear small disturbance equations for transonic flow in an axial compressor blade row
[AD-A053744] p0504 N78-29412
RAFANIELLO, W.
New materials in the Si-C-Al-O-N and related systems
p0601 A78-53864
RAFELIANTS, A. A.
Experimental study of wing skin friction at supersonic speeds
p0118 A78-18983
RAGSDALE, W. C.
Investigation of a side force due to ablation
p0571 A78-50457
RAHA, J. E.
The aerodynamic vane control for V/STOL
p0110 A78-17895
RAIMONDI, E. J.
Recess fasteners
[AD-A053221] p0443 N78-26449
RAINBIRD, W. J.
Optimum design of wind tunnel contractions
[AIAA 78-819] p0297 A78-32373
RAJ, P.
Computation of two-dimensional potential flow using elementary vortex distributions
p0590 A78-51948
RAJU, P. N.
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
RAKHTEENKO, E. E.
Gyroscopic instruments of orientation and stabilization systems
p0280 A78-29859
RAKICH, J. V.
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0821 A78-41841
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
RAKOWSKI, W. J.
A research program for the experimental analysis of blade instability
[AIAA PAPER 78-1089] p0467 A78-43593
RAMACHANDRA, K.
Wildhaber-Novikov profiles for aircraft gears - A photoelastic study of the efficiency of strength-utilisation
p0224 A78-26482
RAMACHANDRA, S. M.
On some singular acoustic signatures observed in the cockpit of a twin engined jet aircraft
[AIAA PAPER 78-242] p0162 A78-20765
Multi-variate optimization problems of flight vehicle synthesis
[PB-276123/7] p0318 N78-21103
RAMACHANDRAN, S.
Multiple control input design for identification of light aircraft
p0114 A78-18466
RAMAGE, J. K.
The fighter control configured vehicle /CCV/ program development and flight test summary
p0125 A78-19444
RAMAKRISHNAN, S. V.
Flow past nonconical wings with separation
p0377 A78-37775
RAMCHAND, K.
Queuing models for estimating aircraft fleet availability
p0069 A78-15895
RAMEY, M. L.
Fighter superiority by design
p0549 N78-30105
RAMSAYER, K.
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906
RAMSBOTTOM, D.
EMC control of the tornado aircraft
p0384 A78-39087
RAMSDEN, J. M.
The geriatric jet problem
p0014 A78-12600
The collision risk
p0175 A78-22851
Mirage 2000 - Dassault's better delta
p0523 A78-49169
RAMSEY, P. R.
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173
RANEY, D. C.
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
RANEY, J. P.
Noise prediction technology for CTOL aircraft
[NASA-TM-78700] p0366 N78-23875
Noise prediction technology for CTOL aircraft
p0497 N78-29057
RAO, A. K.
Queuing models for estimating aircraft fleet availability

p0069 A78-15895
RAO, B. M.
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392
RAO, C. V. V. S.
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474
RAO, D. M.
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
RAO, G. V. R.
Use of leaning vanes in a two stage fan
[NASA-CR-152134] p0319 N78-21115
RAROHA, G. H.
A new concept in integrated reference systems
[AIAA 77-1497] p0006 A78-12245
MIRA - The multifunction inertial reference assembly
p0065 A78-15643
RASHED, M. I.
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
RASSOKHA, A. A.
Experimental investigation of the abrasive wear resistance of composites
p0131 A78-20263
Determination of the constants of the diffusion theory of fatigue fracture
p0132 A78-20289
RASSWEILER, G. G.
Analog versus digital null-steering controllers
p0227 A78-27039
RASTOGI, A. K.
Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
RATCLIFFE, S.
Strategic or tactical air traffic control
p0570 A78-50447
RATWANI, M. M.
Application of resistance curves to residual strength prediction
p0339 A78-35380
RAUDSEPS, J.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
RAUTENBERG, M.
The investigation of blade vibrations in the case of impellers of highly loaded radial compressors by means of data telemetry
p0335 A78-34489
RAVENHALL, R.
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
RAVET, L.
Amplification of distortions in an axial compressor stage
p0046 N78-11983
RAVEZ, R.
Medium and high resistance steels
[AAAF-NT-77-36] p0355 N78-22223
RAVINDRANATH, A.
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
RAWTANI, S.
Evaluation of torsional rigidity of circular arc aerofoil section twisted bars
p0224 A78-26484
RAYMONT, P. A.
The flight control computers of the F-18 electronics set-flight control
[AIAA 77-1479] p0009 A78-12275
RAYNOR, G. S.
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711
RE, R. J.
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Longitudinal aerodynamic characteristics of a fighter model with a close-coupled canard at Mach numbers from 0.40 to 1.20
[NASA-TP-1206] p0456 N78-27136
REA, J. C.
A camera system for small format aerial photography
p0337 A78-34873
READER, K. R.
The effects of cam and nozzle configurations on the performance of a circulation control rotor pneumatic valving system
[AD-A050494] p0352 N78-22103
READEY, H. J., JR.
Center-loaded duct integral rocket-to-ramjet transition testing
[AIAA PAPER 78-937] p0520 A78-48456
REAGON, P. G.
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
REAMER, E. L.
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
REASER, J. S.
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation
[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044
REBONT, J.
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
An experimental study of three-dimensional characteristics of propeller wakes under stalling conditions
p0168 A78-21632
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
RECK, G. M.
Stratospheric cruise emission reduction program
p0040 N78-11077
REDDINGIUS, N.
NOISEMAP computer program operator manual. Addendum for version 3.4 of NOISEMAP
[AD-A049070] p0271 N78-19849
REDDY, K. C.
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
REDDY, K. R.
Helicopter response in gusty winds about a building
p0055 A78-14954
REDDY, N. M.
Similar solutions in nonequilibrium nozzle flows
p0221 A78-25728
Hypersonic flows
p0613 N78-32124
REDDY, N. N.
USB flow characteristics related to noise generation
p0391 N78-24060

Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
REDDY, B.
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
REDEKER, G.
Design and experimental verification of two supercritical airfoils
[DGLR PAPER 78-075] p0478 A78-45240
REDING, J. P.
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057
REDKAR, R. T.
Scientific ballooning in India
p0113 A78-18182
REDLIEN, H. W.
Landing aircraft under poor conditions
p0525 A78-49549
REED, G. J.
Ramjet engine testing and simulation techniques
[AIAA PAPER 78-935] p0519 A78-48455
REED, J. B.
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076
REED, J. E.
Digital avionics, active controls, and the FAA - Advanced integrated flight systems /AIPS/
[AIAA 77-1503] p0006 A78-12250
REED, R. D.
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
REED, T. D.
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058
REED, W. B.
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
REED, W. C.
Use of the U.S. interim standard microwave landing system in Canada
p0523 A78-49333
REED, W. E.
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787
REESE, I. R.
An airplane fiber optic multiplex data bus design and feasibility demonstration system
[AIAA 77-1475] p0005 A78-12232
REEVE, W. H.
Software design for a Visually-Coupled Airborne Systems Simulator (VCASS)
[AD-A055226] p0566 N78-31133
REGAN, D. R.
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
REHBACH, C.
Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
REIBAUD, J.
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349
REICH, M.
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906
REICHENBACH, F. M.
A computer-based system for processing dynamic data
p0372 A78-37108
REICHERT, G.
Long term experience with a hingeless/composite rotor
p0262 N78-19137
REICHERT, J. D.
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
REID, H. J. E., JR.
The year for shaping a digital operations R&D program
p0231 A78-28218
REID, L.
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108
REID, L. D.
A flight path correlation technique for assessing the impact of turbulence in the atmospheric boundary layer on aircraft during the landing approach
p0055 A78-14961
A comparison of techniques for estimating STOL aircraft response to low altitude turbulence
p0130 A78-20196
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
Research on various aspects of atmospheric flight
[AD-A033681] p0302 N78-20088
A review and application of the equivalent deterministic variable technique: The estimation of a STOL aircraft's response to turbulence
[UTIAS-221] p0353 N78-22112
REILLY, M. J.
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
REINHERR, G. W.
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840
REINBOLD, K. A.
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
REININGER, R. C.
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
REIQUAM, E. T.
YC-14 electrical power system - Unique features and problem solutions
p0061 A78-15572
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
REISING, J. M.
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
REITZIG, R.
Experimental analysis and selection of airborne antennas for aircraft-to-satellite communication systems
p0122 A78-19140
REJER, A. A.
Features of unsteady flows over airfoils
p0346 N78-22054
REMPFER, P. S.
Airport surface traffic control TAGS planning alternatives and cost/benefit analysis
[AD-A037790] p0196 N78-16038
Preliminary limited surveillance radar (LSR) cost/benefit analysis
[AD-A046829] p0201 N78-16245
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
RENAUD, A. L.
Technical and financial fall-out on armed forces from commercial and export helicopter programmes
p0264 N78-19150
RENKEN, V.
Civil components program "Wing Section". Concept for large model tests at Modane

[BMFT-FB-W-77-31] p0350 N78-22089
RENNIE, A. J.
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
RESHOTKO, M.
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
RESSLER, E. H.
TIES - Tactical information exchange system
[AIAA 77-1498] p0006 A78-12246
RETCHFORD, J. A.
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
RETTIE, I. H.
The impact of emerging technologies on tactical V/STOL airplane design and utility
[SAE PAPER 770985] p0180 A78-23824
REUBUSH, D. E.
The effect of over-the-wing nacelles on wing-body aerodynamics
[AIAA PAPER 78-1083] p0466 A78-43589
REVELL, J. D.
Fuel conservation merits of advanced turboprop transport aircraft
[NASA-CR-152096] p0316 N78-21095
REVILL, G. W.
Load interaction effects in fatigue crack propagation
p0555 N78-30285
REVUK, A. G.
Probabilistic model of an instrument landing system
p0509 A78-47407
REYMOND, J. C.
Aircraft R-Nav system connected on optical bus
p0054 A78-14941
REYNOLDS, B.
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
REYNOLDS, P. A.
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
REYNOLDS, P. T.
Certifying the Learjet to 51,000 feet
p0234 A78-28462
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
REYNOLDS, T. W.
Alternative fuels
p0040 N78-11074
REYNOLDS, W. H.
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298
REZY, B. J.
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
RHEA, J.
A compass for the crystal ball
p0429 A78-43225
RHOADES, K. W.
Software controlled multiranging Vortac navigation of NASA U-2 aircraft
p0112 A78-17914
RHOADES, W. W.
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
RHODEN, J. A.
Evaluation of a pressurized air start system for advanced army helicopters
[AD-A051967] p0360 N78-23082
RHODES, C. G.
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
RHODES, G. F.
Damping, static, dynamic, and impact characteristics of laminated beams typical of windshield construction
[AD-A054463] p0548 N78-30093
RHODES, H. D.
Impact tests on fibrous composite sandwich structures
[NASA-TM-78719] p0631 N78-33152
RHODES, R. G.
Linear machine power requirements and system comparisons
p0585 A78-51271
RIABCHENKO, V. M.
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
RIABCHENKO, V. P.
Successive-approximation calculation of a steady subsonic gas flow about an airfoil lattice
p0186 A78-24085
RIABKOV, V. I.
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262
RIABOI, A. IA.
Extending the service life of aircraft components made of high-strength steels
p0522 A78-48518
RIABOV, V. V.
The basic characteristics of the variation of aerodynamic parameters in the transition region at hypersonic flow velocities
p0165 A78-20900
RIBNER, H. S.
Two point correlations of jet noise
p0176 A78-23219
A transonic propeller of triangular plan form: An extension
[UTIAS-TN-218] p0454 N78-27123
RICE, M.
A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
RICE, T. S.
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
RICH, B. A.
DAIS - Design and performance
[AIAA 77-1499] p0006 A78-12247
Compatibility testing and integration of DAIS multiplex bus equipments
p0064 A78-15638
RICH, T. P.
Case studies in fracture mechanics
[AD-A045877] p0102 N78-13482
RICHARDS, B. E.
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
RICHARDS, L. G.
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Concorde - Ride quality and passenger reactions
p0418 A78-41166
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
RICHARDSON, C.
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
RICHARDSON, C. A.
A computer controlled aircraft collision avoidance system
[AIAA 77-1524] p0008 A78-12264
RICHARDSON, D.
Fire power
p0288 A78-31425

Mirage 2000 - Dassault's better delta
p0523 A78-49169
RICHARDSON, D. A.
Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114
RICHARDSON, D. J.
AH-1S high-survivable transmission system
[AD-A047558] p0307 N78-20123
RICHARDSON, D. W.
Area navigation systems and procedures
p0316 N78-21091
RICHARDSON, J.
A computerized aircraft performance system
p0435 N78-26084
RICHARDSON, S. A.
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
RICHEY, G. K.
Wind Tunnel/Flight Test Correlation Program on the B-1 nacelle afterbody/nozzle at transonic conditions
[AIAA PAPER 78-989] p0520 A78-48469
RICHTER, H.
Experience with the VOR navigation system in the German Democratic Republic. IV
p0051 A78-13502
RICKARD, J. R.
Instrumentation and control for a large engine test facility
p0107 A78-17584
RICKARD, W. W.
Modeling and parameter uncertainties for aircraft flight control system design
[AIAA 78-1371] p0484 A78-46558
RICKER, G. G.
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
RIDDLEBAUGH, S. M.
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
RIEGELS, F. W.
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
RIEKE, K. L.
Ceramics technology readiness development program. Phase 1. Conceptual designs and material screening
[FB-2786-12] p0632 N78-33243
RIESTER, E.
Flame stabilization in a ramjet combustion chamber by means of a pilot gas generator
[DLR-FB-77-54] p0564 N78-31117
RIFFEL, R. E.
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
Aerodynamic phenomena in an oscillating transonic MCA airfoil cascade including loading effects
p0347 N78-22066
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
RIGGINS, R.
A design of trajectory estimator using multiple DME range measurements
[AD-A055191] p0560 N78-31077
RIGGS, T. L., JR.
Aircraft compensator design methods
[AD-A047814] p0210 N78-17073
RILEY, D. R.
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
RILEY, M. J.
Flight experiments on aerodynamic features affecting helicopter blade design
p0372 A78-36949
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
RINGEL, M. B.
An advanced computer calculation of ground clutter in an airborne pulse Doppler radar
p0066 A78-15662
A high duty factor chirp radar
p0538 A78-49976
RINGLAND, R. F.
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
RIO, R. A.
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111
RIPLE, J. C.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
RISTER, W. C.
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
RIVIELLO, V. P.
An integrated computation program for polars of the finite wings of general aviation aircraft
p0118 A78-18915
Recent developments in numerical solutions for equations of the boundary layer in laminar and turbulent flow
p0118 A78-19030
RIZZETTA, D. P.
A comparative study of two computational methods for calculating unsteady transonic flows about oscillating airfoils
[AD-A056946] p0623 N78-33058
RIZZI, A.
Numerical implementation of solid-body boundary conditions for the Euler equations
p0584 A78-51175
RIZZI, A. W.
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach
[AIAA PAPER 78-1115] p0475 A78-45128
ROBB, J. D.
Protection for aircraft
p0072 A78-16274
ROBECK, P. H.
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
ROBERT, K.
Three-dimensional boundary layer theory using shell geometrical concepts
p0584 A78-51176
ROBERTS, A. S.
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
ROBERTS, C. A.
The status of flight recorders in modern aircraft
p0122 A78-19294
ROBERTS, L.
Toward a new V/STOL generation
p0016 A78-13071
ROBERTS, P. B.
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
ROBERTS, R.
Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
ROBINSON, C. A., JR.
Navy to seek design proposals for new V/STOLS

p0069 A78-15876
Key beam weapons tests slated
p0597 A78-53238
ROBINSON, D. W.
The assessment of noise, with particular reference to aircraft
p0074 A78-16595
Practice and principle in environmental noise rating
[NPL-AC-81] p0367 N78-23885
ROBINSON, L. D.
Investigation of a variable camber wing design
[AD-A045951] p0137 N78-14000
ROBINSON, M. L.
Cross-flow characteristics on a cylindrical body at incidence in subsonic flow
p0373 A78-37406
ROBINSON, R. K.
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
ROBINSON, S. R.
Infrared receiver performance
p0538 A78-49985
ROBINSON, W. W.
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
RODAL, J. J. A.
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
RODDEN, W. P.
Comment on 'Effect of stabilizer dihedral and static lift on T-tail flutter'
p0416 A78-40800
RODENS, J. D.
A-6E TRAM
p0051 A78-13650
RODERICK, W. E. B.
The NAE airborne V/STOL simulator
p0263 N78-19145
RODGER, K. S.
An approach to EMP testing of complete strike aircraft
p0384 A78-39088
EMP induced currents on a simplified missile theory and experiment
p0385 A78-39109
RODGERS, C.
The next generation EW system - ASPJ
p0288 A78-31700
ASPJ - Partners at last
p0336 A78-34676
RODI, W.
Calculation of general three-dimensional turbulent boundary layers
p0176 A78-23188
RODIN, K. G.
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400
RODLING, S.
Flight test of combat aircraft loads and dynamic behavior encountering aircraft trailing vortices
p0125 A78-19443
RODRIGUEZ, J. R.
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
ROE, G.
The design of future cockpits for high performance fighter aircraft
p0370 A78-36446
ROE, M. H.
The HiMAT RPRV system
[AIAA PAPER 78-1457] p0511 A78-47908
ROESSLER, N. J.
In-flight alignment/calibration techniques for unaided tactical guidance
p0534 A78-49929
ROFFE, G.
The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
Development of a catalytic combustor fuel/air carburetion system
[AD-A044063] p0088 N78-12093
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098
ROFFE, G. A.
Development of a catalytic combustor fuel/air carburetion system
p0329 A78-33113
ROGER, M. M.
Air France's new 'freight' installations at Charles de Gaulle Airport at Roissy, France
p0219 A78-25261
ROGERS, C. B.
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
ROGERS, D. W.
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
ROGERS, J. C. W.
Minimum drag surfaces
p0342 A78-35787
ROGERS, W. F.
Space shuttle separation mechanisms
[NASA-TM-58210] p0613 N78-32177
ROGOZIN, IU. A.
Modeling the influence of the ground effect on the aerodynamic characteristics of a wing by means of a flat screen of finite dimensions
p0174 A78-22634
Modeling ground plane influence on wing aerodynamic characteristics using a finite plane screen
p0518 A78-48216
ROLLINS, J.
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
ROLLINS, J. D.
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073
ROLLO, A. J.
Effect of fuel bound nitrogen on oxides of nitrogen emission from a gas turbine engine
[AD-A048382] p0264 N78-19162
ROLSTON, D. R.
Manned simulation testing of digital avionic systems
[AIAA 77-1531] p0009 A78-12282
ROM, J.
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013
ROMAN, J., JR.
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043785] p0354 N78-22117
ROMANOV, G. S.
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
ROMANOV, N. N.
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
ROMANOVICH, S. S.
Numerical calculation of magnetic levitation systems
p0600 A78-53805
RONAASEN, N.
Tri-Gull amphibian development
p0233 A78-28460
ROOKE, D. P.
Stress intensity factors, for collinear cracks in a stiffened sheet
p0378 A78-38122
Stress intensity factors for a cracked hole in a row of holes
[PAE-TR-77073] p0154 N78-15525
ROONEY, E. C.
Development of techniques and correlation of results to accurately establish the lift/drag

characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
ROOS, R.
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
ROSEN, J. M.
Assessment of atmospheric condensation nuclei associated with jet aircraft traffic
[AD-A054319] p0504 N78-29705
ROSENBERG, S. S.
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066
ROSENFELD, C. L.
Moving target analysis utilizing side-looking airborne radar
p0105 A78-17196
ROSENFIELD, S. B.
The Concorde v. the United States - Some conclusions
p0224 A78-26474
ROSENLIEB, J. W.
Emergency and microfog lubrication and cooling of bearings for Army helicopters
[NASA-CR-135195] p0459 N78-27429
ROSFJORD, T. J.
Catalytic flame stabilization for aircraft afterburners
p0290 A78-31955
Aircraft afterburner catalytic flame stabilization
p0572 A78-50570
ROSIER, W. R.
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-FRC-10113-1] p0265 N78-19166
ROSKAM, J.
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
ROSS, A. J.
Flying aeroplanes in buffet
p0078 A78-17130
ROSS, C. A.
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
ROSS, M.
Space optical communications with the Nd:YAG laser
p0285 A78-30886
ROSSEL, V. V.
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
ROSSETTI, A. M.
Shipboard testing of the AV-8A Harrier
p0259 N78-19108
ROSSOW, V. J.
Inviscid modeling of aircraft trailing vortices
p0080 N78-12018
ROTH, G. J.
Load sequences for laboratory simulation of flight-by-flight stress spectra
[ASME PAPER 77-WA/DE-25] p0330 A78-33142
ROTHROCK, M. D.
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
ROTONDI, G.
Some aspects of the problem of flights in ascent
p0119 A78-19041
ROTTENKOLBER, P.
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
ROUAN, D.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
ROUSSEAU, D. G.
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
ROUTH, W. E.
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
ROVKOV, V. A.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
ROWE, W. T.
Advanced supersonic transport engine integration studies for near-term technology readiness date
[AIAA PAPER 78-1052] p0521 A78-48487
ROWLEY, R. B.
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
ROZENDAL, D.
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
ROZHDESTVENSKII, K. V.
Asymptotic theory of a wing moving at small distances from a solid wall
p0133 A78-20462
Asymptotic theory of a wing moving near a solid wall
p0518 A78-48248
ROZHKOV, I. V.
Increasing the resources of jet fuels
p0003 A78-11699
RUBBERT, P. E.
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Computational aerodynamics requirements: The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
A Mach line panel method for computing the linearized supersonic flow over planar wings
[NASA-CR-152126] p0450 N78-27087
RUBEL, H. J.
Engine vibration in flight
[AIAA PAPER 78-1475] p0513 A78-47921
RUBEY, R. J.
Higher order languages for avionics software - A survey, summary and critique
p0536 A78-49959
RUCKER, R. A.
A more fully Automated En Route ATC system
p0595 A78-52959
RUDD, J. L.
Analytical representation of the initial quality of fastener holes
p0217 A78-25180
RUDDICK, D. R.
AN/ARN-101 test and evaluation
p0065 A78-15644
RUDENKO, A. N.
Study of the propagation of higher modes in cylindrical ducts with impedance walls
p0221 A78-25773
RUDEY, R. A.
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Characteristics and combustion of future hydrocarbon fuels
[NASA-TM-78865] p0401 N78-24370
RUDHMAN, W. E.
Calculation of in-flight thrust and estimation of the uncertainty for turbine powered aircraft
p0106 A78-17410
RUDIUK, A.
Aircraft and helicopter cockpit noise
p0278 A78-29673
RUDLAND, R. S.
Use of simulation in evaluating an early warning system for avoidance of jumbo jet trailing vortex turbulence in airports

p0428 A78-43053
RUDNEY, R. A.
Emissions control for ground power gas turbines
p0039 N78-11072
RUDNITSKI, D. M.
Reduction of transient gas turbine test data using a hybrid computer
p0381 A78-38782
RUEDGER, W. H.
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
RUEDINGER, K.
Modern materials, selection, testing, application. II - Surveys about special areas of materials technology for study and practice - Titanium and titanium alloys
p0427 A78-43015
RUETENIK, J. R.
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
RUGGERI, R. S.
Performance with and without inlet radial distortion of a transonic fan stage designed for reduced loading in the tip region
[NASA-TP-1294] p0545 N78-30057
RUGIENIUS, A. V.
The dissection of an aircraft loads spectrum produced by peak-counting accelerometers
[LTR-ST-951] p0202 N78-16391
RUNDELL, D. J.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
RUPAR, C. B.
Aviation fuels - A supplier's perspective
p0287 A78-31308
RUSHAILO, A. M.
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
RUSNAK, J. P.
Low frequency combustion instability in augmentors
p0321 N78-21138
RUSSELL, C. H.
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
RUSSELL, J. A.
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051
RUSSELL, P. L.
Low frequency augmentor instability study
[AIAA PAPER 78-996] p0464 A78-43543
Low frequency combustion instability in augmentors
p0321 N78-21138
RUSSELL, R. E.
Aircraft noise
p0329 A78-33085
RUSSELL, R. W.
Design study of a centerplate mount for wind tunnel models
[AD-A047204] p0201 N78-16073
RUSSO, A.
Comparisons of tabular and observed Omega corrections through use of spectral analysis techniques
p0070 A78-15920
A simplification in position determination with the Omega system
p0070 A78-15921
Use of a field bench for testing turbojet engines
p0527 A78-49731
RUTKOWSKI, M. J.
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
[NASA-TM-78439] p0095 N78-13037
RUZEK, J.
Choice of engine design for small transport aircraft
p0283 A78-30357
RYBAKOV, A. A.
The effect of aerodynamic interference of wing and horizontal tail assembly on the critical velocity of flutter of a flight vehicle
p0126 A78-19633
RYCHKOV, A. D.
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
Investigation of nonequilibrium two-phase flows in axisymmetric Laval nozzles
p0518 A78-48244
RYDER, P.
The role of meteorology in helicopter icing problems
p0376 A78-37712
RYLOV, IU. P.
Experimental investigation of the characteristics of small-sized nozzles
p0167 A78-21090
RYLSKII, G. I.
Piloting and control systems for airplanes and helicopters
p0485 A78-46565
RYNASKI, E. G.
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
RYZHOV, A. A.
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
RYZHOV, O. S.
Application of the method of matching outer and inner asymptotic expansions to the solution of problems in viscous fluid dynamics
p0127 A78-19649
Unsteady boundary layer with self-induced pressure
p0230 A78-28102
Transonic flows past a lift profile
p0274 A78-28961
Laminar hypersonic wake of a lifting body
p0426 A78-42763
On the nonstationary boundary layer with self-induced pressure at transonic external stream velocities
p0591 A78-52043
RZECZYNSKI, B.
Airports for short takeoff and landing
p0178 A78-23471

S

SACHS, G.
Optimum tail plane design for artificially stabilized aircraft
p0276 A78-29334
Minimum trimmed drag and optimum c.g. position
p0473 A78-44831
SADOWSKI, H.
Civil components program "Wing Section". Wing structure parameter study
[BMFT-FB-W-77-30] p0350 N78-22088
SAFF, C. B.
Effect of fighter attack spectrum on crack growth
[AD-A042369] p0037 N78-11054
SAFFMAN, P. G.
Flow over a wing with an attached free vortex
p0059 A78-15337
SAFRONOV, E. D.
Computation of inductive velocity in the plane of a lightly loaded lifting propeller
p0127 A78-19658
SAFRONOV, V. I.
Theory of bending-torsional self-oscillations of an aircraft wing system
p0292 A78-32264
SAGERSER, D. A.
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
Status of advanced turboprop technology
p0447 N78-27055
SAIKI, D. H.
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
SAINA, A.
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
SAIN, M. K.
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327

Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
Alternatives for jet engine control
[NASA-CR-157578] p0563 N78-31107
SAINT JOHN, R. S.
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
SAITO, H.
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
SAKATA, I. F.
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
SAKATA, K.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
SALAUN, P.
Linearized theory of plane, unsteady, supersonic flow through a cascade - Subsonic part of the leading edge
[ONERA, TP NO. 1978-103] p0508 A78-47347
SALEMME, C. T.
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104
SALIVON, N. D.
Nonuniformity of the flow, exciting vibrations in working turbine blades
p0228 A78-27266
SALLEE, G. P.
Technical evaluation report on the 49th(B) Propulsion and Energetics Specialists Meeting on Power Plant Reliability
[AGARD-AR-110] p0141 N78-14048
JT9D jet engine performance deterioration
p0446 N78-27050
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
SALMIRS, S.
Flight experiments to improve terminal area operations
[NASA-TM-78685] p0359 N78-23070
Flight experiments to improve terminal area operations
p0497 N78-29058
SALQUE, J.
Methodology for optimizing an air fleet
p0116 A78-18668
SALVAGIO, J. C.
Why fly supersonically
p0109 A78-17889
SALVINO, J. T.
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
SALWEN, H. C.
A comparative evaluation of modem techniques for simultaneous data and range measurement
[AIAA 77-1474] p0005 A78-12231
SALZMANN, A. R.
Airborne electronic warfare in the modern military force
[AIAA PAPER 78-324] p0185 A78-24018
SAMANT, S. S.
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
SAMANT, V. S.
Airborne defensive fire control algorithms
p0063 A78-15627
SAMMONS, J.
Using accelerated mission testing as a tool within the F100 engine component improvement program
[AIAA PAPER 78-1085] p0466 A78-43590
SAMOKHIN, V. P.
Aerodynamic noise of gliders
p0328 A78-32971
SAMOKHIN, V. G.
Experimental study of the endurance of the vertical-fin sections of an aircraft subjected to acoustic loads
p0582 A78-50941
SAMPATH, S.
A numerical study of viscous flows around airfoils
[AD-A046084] p0137 N78-14001
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
SAMUDRA, S. V.
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
SAMUSSON, L.
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
SAN GIOVANNI, C., JR.
Performance of a differential Omega-ring laser strapdown aircraft navigator
p0537 A78-49966
Performance of a ring laser strapdown attitude and heading reference for aircraft
[AIAA 78-1240] p0540 A78-50162
SAN MIGUEL, A.
Pool fire induced cockpit degradation
p0050 A78-13415
Antimisting fuel kinematics related to aircraft crash landings
[AIAA PAPER 78-270] p0163 A78-20783
Antimisting fuel kinematics related to aircraft crash landings
p0230 A78-28147
SANDAUER, J.
Theory of dolphin-style glider flight and principles of dynamic flight. I
p0231 A78-28195
Theory of dolphin-style sailplane flight and the principles of dynamic flight. II
p0278 A78-29672
SANDELL, N. R., JR.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
SANDERS, D. K.
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
SANDERS, T. H.
Heavy lift helicopter flight control system. Volume 2: Primary flight control system development and feasibility demonstration
[AD-A049580] p0323 N78-21163
SANDLER, M. H.
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284
SANDUSKY, G. T.
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
SANFORD, G. G.
Conformal microstrip phased array for aircraft tests with ATS-6
p0524 A78-49428
SANFORD, R. L.
Ejection under deceleration
[AD-A046117] p0138 N78-14018
SANGIORGIO, G.
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
SANKAR, N. L.
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
A numerical study of viscous flows around airfoils
[AD-A046084] p0137 N78-14001

Numerical study of laminar unsteady flow over airfoils
p0358 N78-23049
SANKARANARAYANAN, R.
Optimum design of a landing gear shock absorber system
p0224 A78-26480
SANTHARAM, A.
One axis artificial feel system
p0224 A78-26488
SANTINI, P.
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
SANZHAREVSKII, L. G.
Aerodynamic characteristics of a system of airfoil profiles
p0132 A78-20275
SAPIRO, D. N.
Aircraft electrical equipment
p0192 A78-24475
SARABUDLA, N. R.
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
SAREN, V. E.
Perturbing forces in the hydrodynamic interaction of thin-blade cascades in a potential flow
p0168 A78-21219
SARGISSON, D. F.
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] p0244 N78-18066
SARIN, S. L.
Generation and suppression of fan-compressor noise
p0075 A78-16599
Generation and suppression of fan-compressor noise
[FOK-3-1823] p0353 N78-22107
SARMA, V. V. S.
Queuing models for estimating aircraft fleet availability
p0069 A78-15895
SAROHIA, V.
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743
SARYAL, M.
Erosion prevention and film cooling on vanes
p0320 N78-21128
SASAKI, R.
A study of fan-rotating noise reduction
p0577 A78-50620
SASAKI, S.
A development of advanced radial gas turbine for automobile
p0575 A78-50603
SASAKI, Y. K.
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692
SATO, G. T.
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
SATO, H.
Artificial control of the laminar-turbulent transition of a two-dimensional wake by external sound
p0227 A78-27143
SATO, J.
Experimental research on high lift airfoil section HL235
p0221 A78-25945
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
SATO, M.
Effects of spanwise circulation distribution on a limit of circulatory lift on wings with finite span
p0133 A78-20373
On lift of delta wings with leading-edge vortices at low speeds
p0387 A78-39772
SATO, N.
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
SATO, R.
Stresses and deformations in stiffened panels with rectangular cut-outs. I - On case of uniform tensile loads
p0223 A78-26266
SATYANARAYANA, B.
Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
SAUNDERS, N. T.
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
SAUNDERS, P. W.
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
SAVELL, C. T.
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
High velocity jet noise source location and reduction. Task 1 supplement: Certification of the General Electric jet noise anechoic test facility
[AD-A042327/7] p0031 N78-10119
SAVOL, A. M.
Pattern recognition as an aid to radar navigation
p0530 A78-49855
SAVVIN, IU. I.
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
SAWFORD, B. L.
Use of NS LX1600A as a short-range altimeter
p0273 A78-28880
SAWYER, C. W., III
Evaluation of a low aspect ratio small axial compressor stage, volume 1
[NASA-CR-135240] p0086 N78-12081
Evaluation of a low aspect ratio small axial compressor stage, volume 2
[NASA-CR-135241] p0086 N78-12082
SAWYER, R. F.
Laboratory studies of lean combustion
p0040 N78-11079
SAWYER, W. C.
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
SAXENA, L. S.
An experimental investigation of oscillating flows over an airfoil
p0299 N78-20058
SCALA, E.
Design and development of helicopter external cargo sling legs made with Kevlar
[AD-A056951] p0626 N78-33093
SCARPATI, T. S.
UTTAS/HLH rotor blade fabrication and testing
p0050 A78-13456
SCATURO, C.
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
SCAZZIGA, I. F.
Quick bearing strength tests for concrete pavements
p0469 A78-44224
SCHAEFER, D. B.
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
SCHAEFER, J. W.
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
SCHAEFFER, D. R.
Wind models for flight simulator certification of landing and approach guidance and control systems
p0268 N78-19723
SCHAEFFER, R. G.
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
SCHAENZER, G.
A simple propulsion system model for the simulation of nonlinear dynamic thrust response
p0419 A78-41397
SCHAFER, R. M.
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890

SCHAFRANEK, D.
On lateral stability of aircraft under random parametric excitations due to vertical gusts
p0333 A78-34158
SCHARTON, T. D.
Acoustical properties of materials and muffler configurations for the 80 by 120 foot wind tunnel
[NASA-CR-152065] p0030 N78-10116
SCHATZLE, P. R.
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
SCHAUBLE, C. C.
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
SCHEER, J. A.
Modern millimeter wave instrumentation radar development and research methodology
p0375 A78-37501
SCHEFER, R. W.
Laboratory studies of lean combustion
p0040 N78-11079
SCHEICHL, L.
Survival after a crash
p0072 A78-16280
Airport fires and their causes
p0339 A78-35274
SCHER, S. H.
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
SCHERZ, C. J.
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
SCHETZ, J. A.
The flow about a slender propeller-driven body in a temperature stratified fluid
[AIAA PAPER 78-209] p0161 A78-20746
SCHIFF, L. B.
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics
[NASA-TM-78471] p0253 N78-19056
SCHIFFEL, D.
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846
SCHIFFLER, R. J.
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
SCHIJVE, J.
Review of aeronautical fatigue investigations in the Netherlands during the period April 1975 to February 1977
[NLR-MP-77005-U] p0494 N78-28494
SCHIPPERS, P.
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
SCHLEGEL, G.
Aircraft response effect on E-field measurements
[AD-A047986] p0248 N78-18272
SCHLEIN, B. C.
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
SCHLIEKELMANN, H. J.
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures
p0444 N78-26475
SCHLIEWA, M.
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives
[BMVG-FBWT-77-16] p0245 N78-18072
SCHLINKER, R. H.
Airfoil trailing edge noise measurements with a directional microphone
[AIAA PAPER 77-1269] p0001 A78-10416
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
SCHLITZER, L. D.
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
SCHLOTHAUER, J.
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints
[DLR-FB-77-63] p0567 N78-31251
SCHMELZER, D.
International trends in airport construction
p0328 A78-32814
SCHMID, R. F.
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045
SCHMIDLAPP, P. L.
ASD strobe light evaluation
[AD-A045533] p0095 N78-13036
SCHMIDT-EISENLOHR, U.
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
SCHMIDT-STIEBITZ, P.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
SCHMIDT, A. W.
Impact of aircraft electrical power quality on utilization equipment
p0537 A78-49962
SCHMIDT, B.
Scan-limited near field testing for directive airborne antennas
p0533 A78-49897
Transonic flow past an airfoil with condensation
[NASA-TM-75201] p0252 N78-19053
SCHMIDT, D. A.
Alternative fuel effects upon combustion efficiency in continuous combustors
p0572 A78-50571
SCHMIDT, D. J.
EAR navigation update modes
p0066 A78-15667
SCHMIDT, D. K.
Optimal flight control synthesis via pilot modeling
[AIAA 78-1286] p0541 A78-50193
Stochastic properties of conflict frequency at multiple connected air route intersections
p0590 A78-51945
SCHMIDT, E.
Unsteady pressure distribution measurements at two trapezoidal wings with unit aspect ratio
p0205 N78-17020
SCHMIDT, G.
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
SCHMIDT, J. F.
Performance with and without inlet radial distortion of a transonic fan stage designed for reduced loading in the tip region
[NASA-TP-1294] p0545 N78-30057
SCHMIDT, L. V.
Circulation control airfoil study
[AD-A048677] p0237 N78-18005
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
SCHMIDT, S. F.
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105
SCHMIDT, W.
Study of pitot-type supersonic inlet-flowfields using the finite-volume approach

[AIAA PAPER 78-1115] p0475 A78-45128
SCHMITT, A. F.
A low cost GPS navigation set for tactical weapons
p0111 A78-17910
SCHMITT, G. F., JR.
In-service performance of polyurethane and fluorocarbon rain erosion resistant radome coatings
p0219 A78-25205
SCHMITT, V.
Calculation of transonic flows around wings
[DGLR PAPER 78-067] p0477 A78-45226
SCHMITZ, B.
Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107
SCHMITZ, F. H.
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
SCHNEIDER, J. D.
Magnus effects on ballistic trajectories
[AD-A048966] p0254 N78-19071
SCHNEIDER, J. E.
ALC/50/ values for some polymeric materials
p0371 A78-36596
SCHNELL, H.
Detectability of flaws in boron and carbon composite parts
p0444 N78-26477
SCHNELL, W. C.
Vectoring non-axisymmetric nozzle jet induced effects on a V/STOL fighter model
[AIAA PAPER 78-1080] p0521 A78-48496
SCHODL, R.
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
SCHOELLER, W.
Integrated Doppler/TACAN navigation through conformity with the least squares method - Analysis from registered flight data
p0280 A78-29906
SCHOENAUER, W.
Streamline coordinates and similarity transformation for the 3-D boundary layer
p0584 A78-51181
SCHOENBERGER, O.
Preventing helicopter mid-air collisions with the proximity warning device
p0585 A78-51223
SCHOENBORN, W. E.
Design for durability - The F101-GE-100 engine
[AIAA PAPER 78-1084] p0522 A78-48497
SCHOENMAN, R. L.
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
SCHOENSTER, J. A.
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
SCHOLL, H. F.
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
SCHOLZ, N.
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111
SCHOMER, P. D.
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879
SCHOMER, R. D.
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
SCHONER, D.
International jurisdiction related to the Warsaw Convention during the years from 1974 to 1976. II
p0589 A78-51822
SCHOPE, F.
Simplified input for certain aerodynamic nose configurations to the Grumman quick-geometry system. A KWIKNOSE user's manual
[AD-A051425] p0394 N78-24089
SCHRA, L.
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminium alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
SCHRADER, O. E.
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
SCHRADER, P.
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction
[BMVG-FBWT-77-23] p0555 N78-30603
SCHREADLEY, H. W.
The evaluation of a digital hardware voter/monitor in an aircraft control system
[AD-A043979] p0043 N78-11117
SCHRECKER, H.
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives
[BMVG-FBWT-77-16] p0245 N78-18072
SCHROEDER, J.
Open loop gust alleviation
[BMFT-FB-W-77-22] p0353 N78-22114
SCHROEDER, J. C.
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
SCHROEDER, R.
Influence of dampers on ground resonance systems by the example of the DFVLR rotor test stand
p0333 A78-34161
SCHROEDER, W.
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016
SCHROERS, L. G.
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113
SCHROTT, A.
Special problems in the determination of the radiation characteristics of antennas on aircraft and satellites with the aid of geometric diffraction theory
p0288 A78-31582
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case
p0248 N78-18290
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case
[ESA-TT-435] p0365 N78-23310
SCHUCHMAN, L.
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
SCHUERMAN, J. A.
High frequency dynamic engine simulation
[NASA-CR-135313] p0097 N78-13059
SCHUETZ, D.
Review of investigations on aeronautical fatigue in the Federal Republic of Germany, May 1975 - April 1977
[LBF-S-133] p0046 N78-11426
Fatigue strength of joints with special fasteners, part 2
[RAE-LIB-TRANS-1920] p0145 N78-14408
Application to life prediction of design data derived from fatigue tests with service-like load sequences
[RAE-LIB-TRANS-1939] p0356 N78-22388

Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
SCHUETZ, R.
NDI methods on full-scale fatigue tests and their service usage
p0444 N78-26471
SCHUETZ, W.
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction
[BMVG-FBWT-77-23] p0555 N78-30603
SCHULMEISTER, L. P.
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
SCHULTZ, T. J.
Synthesis of social surveys on noise annoyance
p0517 A78-48051
SCHULZ-HELBACH, K. D.
A visual simulation procedure for the processing of television images with reduced frame rates in the case of representations of outside views from remotely piloted vehicles
p0592 A78-52498
SCHULZ, B.
The employment of helicopters in construction engineering and assembly operations in the German Democratic Republic
p0050 A78-13498
SCHULZ, D.
Application of modern methods in civil aircraft construction
p0382 A78-38808
SCHULZ, G.
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
SCHULZE, E.
Shipboard launch and recovery of RPV helicopters in high sea states
[AIAA 78-1269] p0540 A78-50179
SCHUM, E. F.
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
SCHUMAKER, R. L.
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046
SCHUMANN, L. P.
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
SCHUPPISSER, K.
Assessment of the structural-mechanical design of commercial aircraft gas turbine engines
p0578 A78-50625
SCHURTER, W. W.
The RF-15: Reconnaissance derivative of the F-15
p0415 A78-40219
SCHUSTER, E. P.
Important simulation parameters for the experimental testing of propulsion induced lift effects
[AIAA PAPER 78-1078] p0521 A78-48494
SCHUSTER, P.
New findings in centrifugal compressor development
[DGLR PAPER 77-063] p0116 A78-18704
SCHUTZ, W.
Calculation methods for fatigue life and crack propagation
p0241 N78-18049
SCHWAB, L. E.
Use of hot-stage-equipped scanning electron microscope in weld repair study of jet engine turbine vanes
p0232 A78-28371
SCHWARMANN, L.
Use of the finite element method in fracture mechanics
[DGLR PAPER 77-055] p0191 A78-24443
SCHWARTZ, H. S.
Durability of adhesive bonded honeycomb sandwich in accelerated adverse environments
p0219 A78-25202
SCHWARTZ, M. M.
Diffusion brazing titanium sandwich structures
p0587 A78-51524
SCHWARTZ, N. P.
Display and speech devices for simulator instructor/operator station applications
[AD-A049247] p0266 N78-19169
SCHWARTZ, P. M.
Advanced technology emphasis for a 1985 tactical supersonic cruise airplane
p0109 A78-17879
SCHWEITZER, K.
Application of skin technology to turbine blades
[AIAA PAPER 78-285] p0163 A78-20792
SCHWENK, J. C.
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
SCHWERDT, K. R.
The direct access radar channel - A distributed minicomputer system
p0596 A78-52976
SCHWIND, R. G.
High angle canard missile test in the Ames 11-foot transonic wind tunnel
[NASA-CR-2993] p0405 N78-25057
SCIARRA, J. J.
Finite element analysis for complex structures, helicopter transmission housing structural modeling
[AD-A052759] p0397 N78-24126
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
SCLAFANI, A. S.
Design evolution of a supersonic cruise strike-fighter
[AIAA PAPER 78-1452] p0528 A78-49783
SCORER, R. S.
Environmental aerodynamics
p0332 A78-33802
SCOTT, I. G.
NDI and the detection of fatigue
p0554 N78-30282
SCROFANI, O.
An auxiliary array with decelerating blades - Secondary losses and back pressure in the transonic regime
p0119 A78-19050
Choice of cycle for a regenerative bypass turbojet for long-range aircraft
p0527 A78-49723
SCRUGGS, R. M.
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
SCULL, D. C.
The Omega radionavigation system comes to the Pacific Ocean area
p0525 A78-49660
SEAMAN, H. M.
Microprocessor controlled testing of Air Data Computers
p0065 A78-15649
SEARLE, N.
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
Characteristics of USB noise
p0391 N78-24061
SEARS, W. R.
A note on adaptive-wall wind tunnels
p0002 A78-11634
SEBASTIAN, J. D.
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999

SECKEL, E.
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
SEDGWICK, G.
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145
SEEBASS, A. R.
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Unsteady transonic flow computations
[AD-A049188] p0254 N78-19068
SEEGMILLER, H. L.
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
SEELIGER, G. G.
Coatings for aircraft which operate in marine environments
p0468 A78-44113
SEEMAN, D. R.
Methodology for determining, isolating, and correcting runway roughness
[AD-A044328/3] p0099 N78-13078
SEEMANN, G. R.
A subsonic ramjet engine for expendable drones
[AIAA PAPER 78-962] p0463 A78-43522
SEFIC, W. J.
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
SEGAL, H.
Concorde emissions at Dulles International Airport - Results of measurements
p0597 A78-53050
SEIDEL, M.
The German-Dutch low speed wind tunnel DNW
p0370 A78-36447
SEIFERT, R.
Display systems and cockpit design
p0550 N78-30116
SEILER, M. R.
An analytical and experimental investigation of diffusers for VSTOL thrust augmenting ejectors
[AIAA PAPER 78-1509] p0516 A78-47945
An investigation of corner separation within a thrust augmenter having Coanda jets
[AD-A052131] p0366 N78-23392
SEJNOST, D.
Methods and equipment for testing for acoustic fatigue
p0283 A78-30354
SEKISTOV, V. A.
Aircraft and helicopter engines - Fundamentals of design and flight operations
p0059 A78-15222
SELDNER, K.
Procedures for generation and reduction of linear models of a turbofan engine
[NASA-TP-1261] p0556 N78-30896
SELIVANOV, G. D.
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
SELIVANOV, O. D.
Optimal control of aircraft powerplant
p0597 A78-53119
SELLS, C. C. L.
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
SELZER, H.
Mode of operation and characteristics of Darrieus rotors
p0273 A78-28560
SEMBONGI, S.
The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
SEMENCHIN, V. A.
Aerodynamic characteristics of a system of airfoil profiles
p0132 A78-20275
SEMENYCHEV, A. V.
Suboptimal adaptive filtering of radio signals
p0601 A78-53903
SEN, R.
Approximate transonic profile flow at incidence with shock
p0582 A78-51096
SENDERAK, K. L.
Engineering evaluation tests of 20-ampere airborne battery charger (breadboard) manufactured by Sunstrand Corporation
[AD-A045011] p0090 N78-12342
SENGUPTA, G.
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2
[NASA-CR-145262] p0404 N78-24900
SENKAR, N. L.
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
SENNE, K. D.
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074
SENOO, Y.
Swirl flow in conical diffusers
p0230 A78-27910
Pressure at shroud and flow in a supersonic centrifugal impeller
p0576 A78-50613
SENSBURG, O.
Impact of active control on structures design
p0550 N78-30113
SEPP, P.
The Dual-Flight-Simulator on the evaluation of air combat effectiveness
[DGLR PAPER 77-080] p0290 A78-31948
SERAFIN, G.
A new mathematical method for the aerodynamic smoothing of profiles
p0118 A78-19039
SERAJI, H.
Design of multivariable PID controllers with application to a gas-turbine
p0072 A78-16308
SEREBRIISKII, IA. M.
Determination of the wave drag of an airfoil profile by means of interferometry in near-sonic flow
p0126 A78-19640
Approximate method of calculating the lifting force and the longitudinal moment of an airfoil section at low velocities with allowance for viscosity
p0163 A78-20849
SEREGIN, A. S.
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
SEREGIN, V. V.
Generalized algorithm of the analytical method of gyrocompassing
p0216 A78-25013
SERGEEVA, O. V.
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
SEROVY, G. K.
Loss prediction in axial compressors - A bibliographic study
[ONERA, TP NO. 1978-65] p0383 A78-38892
SERREYN, D.
Autothreshold autoscreener/FLIR system
p0538 A78-49984
SERTOUB, G.
Recent developments in automatic testing
p0108 A78-17663
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics
[AAAF-NT-77-35] p0403 N78-24587
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
SETHURAMAN, S.
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small

aircraft
[BNL-23633] p0460 N78-27711
SEVCIK, W. B.
An analytical study of thermal barrier coated first stage blades in a JT9D engine
[NASA-CR-135360] p0198 N78-16054
SEVY, R. W.
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
SEWARDS, A.
Satellites for position determination
p0601 A78-53911
SFORZA, P. M.
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
SHAALAN, M. R. A.
An experimental investigation into the effect of errors in blade setting on the low-speed performance of a compressor cascade
p0108 A78-17723
SHADOWEN, J. H.
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
Design and verification of a turbofan Swirl augmentor
p0572 A78-50564
SHAENZER, G.
Direct lift control for flight path control and gust alleviation
p0434 N78-26072
SHAFFER, I. S.
A method of predicting stress corrosion cracking
p0468 A78-44105
SHAFFER, L. W.
Wide-angle, multiviewer infinity display design
[AD-A051158] p0364 N78-23108
SHAGAEV, A. A.
Approximate method of calculating subsonic compressible flows past a lifting wing profile
p0164 A78-20883
SHAGENA, J. L.
Landing aircraft under poor conditions
p0525 A78-49549
SHAH, L. C.
Dynamic analysis using superelements for a large helicopter model
p0617 N78-32486
SHAHADY, P. A.
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
Quiet propeller/rotor concept evaluation
[AD-A047297] p0197 N78-16047
SHAHANI, V.
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478
SHAHIN, M. Y.
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170
SHAIKHUTDINOV, Z. G.
Thrust characteristics of thrust vector control systems with blowing injection of chemically nonreactive gases
p0187 A78-24254
SHAIKIN, A. P.
Mechanism of pulsating combustion of the liquid fuel fed to the airflow through the circulation zone behind the flame stabilizer
p0581 A78-50788
SHAIN, W. M.
Test data report, low speed wind tunnel tests of a full scale lift/cruise-fan inlet, with engine, at high angles of attack
[NASA-CR-152055] p0252 N78-19049
SHALAEV, S. P.
Influence of acoustic reflectors on the discrete component of the noise spectrum of a supersonic jet above the critical pressure
p0134 A78-20469
SHANBHAG, M. R.
Large deflection static analysis of typical tail-wheel structure of light aircraft by finite element method
p0522 A78-48864
SHANG, J. S.
Three-dimensional supersonic interacting turbulent flow along a corner
[AIAA PAPER 78-1210] p0424 A78-41897
Computation of a supersonic flow past an axisymmetric nozzle boattail with jet exhaust
[AIAA PAPER 78-993] p0464 A78-43541
SHANKAR, V.
Computational transonic airfoil design in free air and a wind tunnel
[AIAA PAPER 78-103] p0158 A78-20685
SHARMA, R.
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
SHARMA, R. K.
An experimental study of the steady-state response of oil-film dampers
[ASME PAPER 77-DET-33] p0135 A78-20598
SHARMA, V. P.
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
SHARP, J. B.
Subsystem verification of an AFLC organically developed F-15 simulation
p0533 A78-49901
SHARP, J. D.
An example of additive damping as a cost savings alternative to redesign
[ASME PAPER 77-WA/GT-2] p0330 A78-33168
SHARP, P. S.
B-1 progress report
p0125 A78-19446
B-1 terrain following
p0125 A78-19447
B-1 terrain following development
p0233 A78-28456
B-1 terrain-following development
p0432 N78-26061
SHARPE, E. L.
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
SHARPE, T. G.
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
SHARPLES, T.
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
SHAU, G. C.
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
SHAW, A. W.
The impact of current V/STOL flying quality control requirements on the propulsion system
[AIAA PAPER 78-924] p0462 A78-43502
SHAW, J. C.
Benefits of strapdown over gimbal INS systems for aircraft application
p0282 A78-30253
SHAW, L. M.
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
SHAW, R. J.
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
SHCHERBAKOV, A. V.
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature

in the cabin
p0518 A78-48234
SHCHERBAKOV, V. A.
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
SHCHERBININ, A. I.
Test of an aviation oil, increased-density MS-20
p0220 A78-25475
SHCHUKIN, A. V.
Calculation of the thermal state of turbine blades with film cooling
p0187 A78-24274
SHCHUKIN, V. K.
Heat transfer from two-phase flow to the nozzle walls in the presence of a condensate film on the nozzle surface
p0581 A78-50791
SHEAR, W. G.
Avionics for the discrete address beacon system /DABS/
[AIAA 77-1511] p0007 A78-12256
SHEBALOV, A. N.
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
SHEFFIELD, J. S.
Flow over a wing with an attached free vortex
p0059 A78-15337
SHEFTEL, D. J.
Overview of potential ATC developments
p0596 A78-52970
SHEININ, V. M.
Weight design and the efficiency of passenger aircraft. Volume 2 - Calculation of the center of gravity and moments of inertia of aircraft. Weight analysis
p0282 A78-30175
SHELDON, D. F.
An appreciation of the dynamic problems associated with the external transportation of loads from a helicopter - State of the art
p0114 A78-18429
SHELDON, R. G.
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
SHELOMOV, N. A.
Computer-aided statistical analysis of the stress-strain state of load-carrying structures
p0131 A78-20267
SHELPIAKOV, A. N.
Experimental investigation of laminar-to-turbulent-flow transition under the effect of acoustic oscillations
p0593 A78-52763
SHEN, C. N.
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
Vibrations of a helicopter rotor blade using finite element unconstrained variational formulations
[AD-A052670] p0397 N78-24125
SHENKMAN, A. M.
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
SHEORAN, Y.
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
SHERMAN, C. A.
Experimental determination of the rattle of simple models
[NASA-TM-78756] p0555 N78-30291
SHERMAN, D. J.
Gust measurements and the N sub o problem
p0554 N78-30276
SHERMAN, M. M.
Hardened reentry vehicle development program. Erosion-resistant nosetip technology
[AD-A056390] p0630 N78-33128
SHERMAN, W. L.
Airplane stability calculations with a card programmable pocket calculator
[NASA-TM-78678] p0552 N78-30138
SHERRER, V. C.
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
SHERRIEB, H. E.
Ground effects testing of two, three, and four jet configurations
[AIAA PAPER 78-1510] p0529 A78-49789
SHERSTIUK, A. N.
Experimental investigation of a centripetal turbine with adjustable guide vanes
p0338 A78-34975
SHERSTIUKOV, V. A.
Investigation of two-tier blade diffusors of centrifugal compressors
p0467 A78-43644
SHESTOPALOV, V. P.
Lifting force of a plane H-polarized electromagnetic wave
p0293 A78-32296
SHET, U. S. P.
A case for a new model for turbulent flame propagation
p0229 A78-27840
SHEVCHENKO, V. I.
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
SHEVELEV, A. S.
Article quality index realization logic-block diagram
p0049 A78-13179
Quality assurance in the fabrication of products in aviation technology
p0292 A78-32267
SHEVELL, R. S.
The value of aerospace design synthesis courses as viewed by aerospace professionals
[AIAA PAPER 78-1493] p0515 A78-47934
SHIDLER, P. A.
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise
p0620 N78-32827
Full-scale testing of an Ogee tip rotor
p0620 N78-32830
SHIEMBOB, L. T.
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
SHIFRIN, E. G.
Uniqueness 'in the large' of the solution to the direct problem of the Laval nozzle
p0376 A78-37613
SHIMODAIRA, M.
Microfractographic fracture analysis of some aircraft parts
p0273 A78-28789
SHIMOKAWA, T.
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
SHINAR, J.
Analysis of optimal turning maneuvers in the vertical plane
[AIAA 78-1333] p0482 A78-46531
Prediction of roll-controllability of slender cruciform canard configurations
[AIAA 78-1338] p0483 A78-46535
SHINDO, S.
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
SHINHA, P. K.
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
SHIOTA, Y.
Temperature profiles of rotating cooled blade
p0573 A78-50581
SHIPLEY, J. L.
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle
p0263 N78-19144

SHIPLEY, B. G.
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
SHIRAHATA, H.
A finite element solution of cascade flow in a large-distorted periodic flow
p0427 A78-42997
SHIRAKURA, T.
Thermodynamical performances of closed-cycle gas-turbine
p0575 A78-50605
SHIRLEY, T. E.
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
SHISHKOV, A. A.
Experimental investigation of asymmetric Laval nozzles
p0170 A78-22361
SHIVANANDA, T. P.
Surface pressure measurements at the tip of a model helicopter rotor in hover
p0473 A78-44832
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
SHKVAR, A. IA.
Investigation of the flow in a plane diffuser by means of a laser Doppler anemometer
p0274 A78-28969
SHLIAKHOVA, ZH. V.
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
SHOEMAKER, W.
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
SHOMBER, H. A.
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
SHOPALOVICH, P.
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278
SHORT, B. F.
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981
SHOVLIN, M. D.
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
SHOWALTER, T. W.
Microwave landing system utilization and conventional avionics
[AD-A044297] p0083 N78-12055
SHRAGER, J. J.
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063
SHREEVE, R. P.
Probe measurements of velocity and losses from a small axial transonic rotor
[AIAA PAPER 78-1198] p0476 A78-45138
SHROUT, B. L.
Effect of a simulated engine jet blowing above an arrow wing at Mach 2.0
[NASA-TP-1050] p0020 N78-10030
SHTEINBERG, R. I.
The effect of blunting the leading edge of a delta wing on its aerodynamic characteristics during supersonic flight
p0166 A78-20920
SHUETZ, D.
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
SHUKIN, V. K.
Convective heat transfer from a gas suspension to the flow area of a throttle with a blade-shaped throttling element
p0581 A78-50792
SHULGIN, V. I.
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
SHUMAKER, G. C.
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
SHUMSKII, V. V.
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926
SHUNG, Y. K.
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
SHUPE, N. K.
An approach guidance system for remotely-piloted vehicles
[AD-A041561] p0022 N78-10043
SHUTZ, D.
The collection and analysis of fatigue damage occurring in aircraft in service
[RAE-LIB-TRANS-1934] p0349 N78-22077
SHVETS, A. I.
Effect of a conical break of delta-wings on the aerodynamic characteristics
p0167 A78-21084
SICHEL, M.
Analysis of spray combustion in a research gas turbine combustor
p0014 A78-12566
Analysis of spray combustion in a research gas turbine combustor
p0373 A78-37297
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
SICLARI, M.
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
SICLARI, M. J.
A study of the inviscid flow about conically cambered delta wings
[AIAA PAPER 78-58] p0171 A78-22561
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833
SICRE, J.
Equipment permitting fuel savings during approach
[AAAF-NT-77-27] p0397 N78-24130
SIEGEL, W. H.
Structural analysis of ultra-high speed aircraft structural components
[NASA-CR-155334] p0101 N78-13476
Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft
[NASA-CR-144863] p0310 N78-20534
SIEGLER, W.
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394
SIERAKOWSKI, R. L.
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
SIEWERT, R. F.
Analysis of advanced variable camber concepts for combat aircraft
p0592 A78-52592
Analysis of advanced variable camber concepts
p0549 N78-30108

SIGALLA, A.
Real flow limitations in supersonic airplane design
[AIAA PAPER 78-147] p0173 A78-22586
Propulsion for future supersonic transports - 1978 status
[AIAA PAPER 78-1051] p0521 A78-48486
SIGALOV, G. F.
Supersonic flow-around of thin bodies with Mach number close to unity
[AD-A051884] p0358 N78-23059
SIGNORELLI, R. A.
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
SILVA, J. P.
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
SIMAKOV, A. A.
Operational experience with long-safe-life gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
SIMENZ, R. F.
Alloy needs and design - The airframe
p0285 A78-30856
SIMKIN, E. L.
Statistical evaluation of the effect of a jet reverser on the parameters of a turbofan engine in the direct thrust regime
p0187 A78-24275
SIMMONS, J. M.
A quasisteady theory for incompressible flow past airfoils with oscillating jet flaps
p0222 A78-26229
Entrainment characteristics of unsteady subsonic jets
p0223 A78-26238
SIMMONS, R. L.
The terrain following task for the advanced tactical fighter using discrete optimal control
p0531 A78-49862
The terrain following task for the advanced tactical fighter using discrete optimal control
[AD-A055196] p0565 N78-31121
SIMON, D. R.
The Advancing Blade Concept (ABC) rotor program
p0263 N78-19143
SIMPSON, A.
The effects of vibration on an aircraft fuel density meter
p0105 A78-17298
SIMPSON, D. M. S.
Planning and procedures for aircraft demonstrations - V/STOL aircraft
p0380 A78-38749
SIMPSON, E. C.
The answer to the 'engine deficiency' question
p0126 A78-19546
SIMPSON, R. C.
Microprocessor realization of the bus interface unit for a distributed avionic computer system
p0066 A78-15661
SIMPSON, R. L.
Some important physical phenomena in flows with separated turbulent boundary layers
p0336 A78-34839
SIMPSON, W. R.
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042483] p0023 N78-10053
SIMS, D. L.
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
Titanium damage tolerant design data for propulsion systems
[AD-A053252] p0442 N78-26202
SIMS, K. L.
An aerodynamic investigation of a forward swept wing
[AD-A048898] p0254 N78-19069
SINACORI, J. B.
The determination of some requirements for a helicopter flight research simulation facility
[NASA-CR-152066] p0030 N78-10117
SINAI, Y. L.
The wave system attached to a finite slender body in a supersonic relaxing gas stream
p0228 A78-27146
SINCLAIR, M.
The wind and turbulence measuring system of the NAE Airborne V/STOL Simulator
p0285 A78-30850
SINCLAIR, S. R. M.
The NAE airborne V/STOL simulator
p0263 N78-19145
SINGH, P.
Three dimensional free convection flow and heat transfer along a porous vertical plate
p0569 A78-50288
SINGH, R. P.
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
SINGLETON, I. J.
F-15/16 canopy off testing
p0233 A78-28453
SINHA, A. N.
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
SIPPEL, K. O.
Material selection for the Tornado taileron
p0383 A78-38811
SIRAZETDINOV, T. K.
Dynamic model of a system of scientific research and industrial plants
p0174 A78-22645
The problem of choosing design parameters for unpiloted flight-vehicles
p0292 A78-32258
Analytical design of an automaton for the longitudinal control of an aircraft
p0292 A78-32262
Optimal control synthesis in distributed systems with incomplete information
p0518 A78-48215
SISK, T. R.
A technique for the assessment of fighter aircraft precision controllability
[AIAA 78-1364] p0484 A78-46553
SISTO, F.
Research on the flutter of axial-turbomachine blading
[AD-A047086] p0194 N78-16021
SIZOVA, R. N.
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
SKAAR, T.
Air-sea rescue operations. Search and rescue experience
p0262 N78-19134
SKIBA, G. G.
Method for calculating the aerodynamic coefficients of some three-dimensional bodies of arbitrary cross section
p0133 A78-20459
Method of calculating aerodynamic coefficients of some three-dimensional bodies with arbitrary cross section
p0518 A78-48245
SKIBO, M. A.
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads
[NASA-CR-135395] p0454 N78-27124
SKIRA, C.
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
SKOBELTSYN, IU. A.
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
SKOROBATCKYI, M.
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100

SKREBUSHEVSKII, B. S.
Spacecraft flight control systems
p0599 A78-53434
SKRIPACH, B. K.
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-1907,
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079
SKRIPKA, V. P.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
SKRZYNSKI, S.
Discussion of results of studies on the design of laminar airfoils for stunt gliders
p0369 A78-36204
Hot-wire velocity measurements in thin boundary layers
p0369 A78-36205
SKUDRIDAKIS, J.
Calculation of horizontal tail loads in maneuvering flight
[DLR-IB-536-76/4] p0137 N78-14003
Calculation of the horizontal tail loads from elevator actuation
[DLR-IB-536-76/4] p0238 N78-18011
SKUDRNA, J. T.
The AN/APX-100/V/ transponder
p0537 A78-49971
SLATER, G. L.
Optimal controls for an advanced turbofan engine
p0183 A78-23893
SLAVIANOV, N. N.
Velocity profiles in the Laval nozzle throat for uniform compressible swirling flow
p0165 A78-20905
SLEEMAN, W. C., JR.
Upper-surface-blowing flow-turning performance
p0389 N78-24048
SLEEPER, R. K.
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Summary of NASA landing-gear research
p0497 N78-29056
SLISKI, M. J.
Aerodynamic heating to the hypersonic research aircraft, X-24C
[AIAA PAPER 78-37] p0157 A78-20647
SLITIKOVA, V. M.
Oxidation products of fuels obtained by hydrogenation processes
p0334 A78-34319
SLIVINSKY, C.
Comparison monitoring in redundant digital flight control systems
p0531 A78-49865
Inherent errors in asynchronous digital flight controls
[AD-A055649] p0565 N78-31124
SLIVINSKY, C. J.
Approaches to improving aircraft efficiency
[AIAA PAPER 78-305] p0184 A78-24007
SLOBODIANIUK, L. I.
The start-up of a gas turbine engine using compressed air tangentially fed onto the blades of the basic turbine
p0187 A78-24149
SLOBODKINA, F. A.
Stability of subsonic gasdynamic flows
p0274 A78-28959
SLODOWNIK, A.
Some problems of exploitation of jet turbine aircraft engines of Lot Polish Air Lines
[AD-A046221] p0151 N78-15048
SLOOFF, J. W.
Aerodynamic design of thick, supercritical wings through the concept of equivalent subsonic pressure distribution
[NLR-MP-78011-U] p0477 A78-45230
SLOPER, D. K.
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
SMALL, W. J.
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
SMEDLEY, R. D., JR.
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
SMILEY, R. P.
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
SMIRNOV, N. N.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
SMITH, A. K.
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
SMITH, A. L.
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
SMITH, A. M. O.
Stratford's turbulent separation criterion for axially-symmetric flows
p0002 A78-11635
SMITH, B. G.
Aviation fuel usage - Economy and conservation
p0285 A78-30698
SMITH, B. R.
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
SMITH, C. A.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
SMITH, C. D.
Standard modular power supplies for avionics
[AD-A057159] p0627 N78-33100
SMITH, C. T.
An evaluation of the capability of the logistics composite model to project the monthly aircraft sortie effectiveness of an F-15 wing
[AD-A047227] p0193 N78-15993
SMITH, E. B.
Aeroelastic instability in F100 labyrinth air seals
[AIAA PAPER 78-1087] p0467 A78-43591
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
SMITH, E. G.
JTIDS - An update
[AIAA 77-1521] p0008 A78-12262
SMITH, E. L.
Engine development toward lower energy consumption and reduced environmental impact
[AIAA PAPER 78-307] p0184 A78-24008
SMITH, F. T.
On the calculation of the incompressible flow past an aerofoil with a jet flap
p0289 A78-31838
SMITH, G. D.
Ejector-powered engine simulators for small-scale wind tunnel models of high performance aircraft
[AIAA 78-826] p0298 A78-32388
SMITH, G. M.
The determination of margins of safety for critical aircraft systems
p0384 A78-39082
SMITH, H. J.
A new formulation for the epsilon method applied to the minimum-time-to-climb problem
p0357 N78-23028
SMITH, H. W.
Back to the drawing board
p0126 A78-19548
Teaching design at all levels
[AIAA PAPER 78-1455] p0511 A78-47906
SMITH, J. D.
Airport aircraft economic interface
[SAE PAPER 770580] p0060 A78-15387
SMITH, J. H. B.
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384

Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
SMITH, J. J.
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
SMITH, J. M.
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
SMITH, J. W.
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
SMITH, K. F.
An empirical/analytical design methodology for gas turbine combustors
[AIAA PAPER 78-998] p0464 A78-43545
SMITH, L. A.
Dual device redundancy management
[AIAA 77-1441] p0015 A78-12695
SMITH, M. A.
Fatigue research on bonded carbon fibre composite/metal joints
p0002 A78-11400
SMITH, M. F.
Fiber optics, volume 2. Citations from the NTIS data base
[NTIS/PS-78/0713/4] p0636 N78-33918
SMITH, M. G., JR.
Advanced supersonic transport propulsion systems
[SAE PAPER 771010] p0182 A78-23842
SMITH, P. G.
Multipath limitations on low-angle radar tracking
p0222 A78-26157
SMITH, P. M.
Low-speed aerodynamic characteristics from wind-tunnel tests of a large-scale advanced arrow-wing supersonic-cruise transport concept
[NASA-CR-145280] p0312 N78-21053
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111
SMITH, P. S., JR.
A microprocessor interface between an inertial measurement unit and the B-1 avionics multiplex data bus
p0068 A78-15695
SMITH, R.
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
SMITH, R. E.
Software engineering a must for success in computerized flight test
[AIAA PAPER 78-1463] p0512 A78-47913
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050
SMITH, R. G.
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
SMITH, R. H.
The PIO problem - Theory and implications to flight test
p0125 A78-19442
Diary of an international team co-ordinating system electromagnetic compatibility of an avionic sub-system
p0384 A78-39085
Propulsion-airframe interactions predictability
p0434 N78-26079
A theory for longitudinal short-period pilot induced oscillations
[AD-A056982] p0630 N78-33120
SMITH, R. L.
Optimal missile evasion
[AD-A053267] p0439 N78-26135
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
SMITH, R. T.
Critical inspection of bearings for life extension
p0444 N78-26472
SMITH, R. V.
A theoretical and experimental study of circulation control with reference to fixed wing applications
[RP-582] p0623 N78-33052
SMITH, T. R.
An assessment of some forms of follower-tooth reduction gear and its application to helicopter main rotor gearboxes
[RAE-TR-77040] p0150 N78-15035
SMITH, W. D.
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
SMITHEY, W. J. H.
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
SMOLICZ, T.
Systems analysis of safety in aviation. I
p0178 A78-23470
Systematic analysis of safety in aviation. II
p0278 A78-29674
SMOLIN, V. N.
Selection of spray nozzle and its operating regimes for removing ice deposits, frost, and frozen-on snow from airplane surfaces
p0049 A78-13184
SNERDEL, S. C.
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
SNULLIN, J. I.
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
SNYSLOV, V. I.
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
SNYTH, C. C.
Computing internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter low glare canopy design
[AD-A043367] p0032 N78-10873
SNYTH, R.
Special problems in the development of the propulsion system for an over-the-wing engine configuration
[DGLR PAPER 77-046] p0190 A78-24435
Comparison of estimated and flight data for rolling take-off and transition of a VTOL aircraft
p0435 N78-26083
SNYTH, R. K.
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Preliminary Candidate Advanced Avionics System (PCAAS)
[NASA-CR-152026] p0024 N78-10061
SNEDDON, M. D.
Acoustical properties of materials and muffler configurations for the 80 by 120 foot wind tunnel
[NASA-CR-152065] p0030 N78-10116
SNEDEKER, R. S.
Viscous effects in aircraft trailing vortices
p0080 N78-12019
SNEL, H.
Evaluation of a method for the predicton of jet-airframe interference
[NLR-TR-76132-U] p0438 N78-26111
SNYDER, F. S.
Conceptual design of single turbofan engine

powered light aircraft
[NASA-CR-151972] p0197 N78-16045
SNYDER, M. R.
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
SNYDER, R. G.
General aviation crash survivability
[SAE PAPER 780017] p0331 A78-33360
SOBIECZKY, H.
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Calculation of local three-dimensional supersonic fields
p0584 A78-51184
Shock obliquity effect on transonic shock-boundary layer interaction
p0584 A78-51185
SOBIERAJ, W.
Natural, flexural-torsional vibration analysis of helicopter rotor blades by the finite element method
p0338 A78-34949
SOBIESZCZANSKI-SOBIESKI, J.
Advanced structural sizing methodology
p0448 N78-27064
SOCKOL, P. M.
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
End-wall boundary layer prediction for axial compressors
[NASA-TM-78928] p0441 N78-26144
SODERQUIST, J. R.
Application of composites on civil aircraft
p0218 A78-25199
SOEDER, J. P.
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
SOFRIN, T. G.
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
SOHN, H. M.
Improved operational maintenance forcasting techniques
p0052 A78-13848
SOIN, N.
The technical concepts behind the IL-62M /8/ landing gear
p0371 A78-36622
SOKKAPPA, B. G.
A system concept of metering and spacing
p0595 A78-52968
SOKOLOV, G. A.
Spacecraft flight control systems
p0599 A78-53434
SOKOLOV, L. A.
Asymptotic theory of the onset of separation at a flap on a cooled body situated in hypersonic flow under conditions of weak hypersonic interaction
p0128 A78-19671
SOKOLOV, M.
Transition behavior of a Blasius-type boundary layer subjected to uniform blowing or suction
p0418 A78-41149
SOKOLOVSKII, G. A.
Application of a finite difference scheme to the numerical solution of the direct problem of a two-dimensional cascade of airfoils
p0220 A78-25636
SOLASH, J.
Evaluation of coal-derived JP-5 fuels
p0461 A78-43417
SOLLIDAY, H. E.
Test pilot report on the angle rate bombing system
p0055 A78-14946
SOLODUKHIN, V. A.
Optimization techniques for air traffic control problems
p0522 A78-48504
SOLOMAN, M.
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
SOLOMON, M. D.
A study of the lift-to-drag ratio capability of caret wing waveriders
[AD-A053691] p0498 N78-29069
SOLOMON, R.
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251
SOLOMONOV, P. A.
Reliability of aviation techniques and flight safety
p0371 A78-36494
SOLTES, A. S.
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
SOMM, P. T.
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
SOMMER, C.
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
SONE, H.
Development of the can-type gas turbine combustors
p0574 A78-50590
SONJU, O. K.
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
SONNAD, V. R.
Application of the viscous-inviscid iteration technique using surface transpiration to calculate subsonic flow over wing-body configurations
[AIAA PAPER 78-1203] p0423 A78-41893
SOOHOO, P.
Aerodynamic interference effects on tilting proprotor aircraft
[NASA-CR-152053] p0092 N78-13007
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
SOPER, W. P. C.
Design philosophy for airframes
p0509 A78-47453
SORENSON, J. A.
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105
SOROKIN, A. P.
Influence of the principal parameters of a high-aspect-ratio wing /through its construction weight/ on the magnitude of the payload
p0128 A78-19693
SOROKIN, V. G.
Influence of technological factors on the resistance to fracture of refractory materials in high-speed air flows
p0582 A78-50935
SORRENTINO, G.
A simulation procedure for the optimization of jammer efficiency against search radars
p0054 A78-14936
SORRENTINO, P. P.
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
SOSKIC, M.
Flight measurements of the wing tip vortex
p0449 N78-27074
SOSNOVSKII, A. A.
Onboard radio-navigation and landing aids for aircraft
p0473 A78-44806

SOUTH, J. C., JR.
Application of a multi-level grid method to transonic flow calculations
p0011 A78-12296
SOUTHALL, J. W.
The design process
[AIAA PAPER 78-1483] p0514 A78-47928
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
SOUTHALL, W. A., JR.
Airborne antenna coverage requirements for the TCV B-737 aircraft
[NASA-TM-78647] p0153 N78-15325
SOWERS, H. D.
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
SPADY, A. A., JR.
Airline pilot scanning behavior during approaches and landing in a Boeing 737 simulator
p0432 N78-26064
SPAETH, J. L.
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
SPAID, F. W.
On the boundary layer displacement effect near the trailing edge of an aft-loaded airfoil
p0002 A78-11636
SPAMER, T.
Spectrum crack growth in adhesively bonded structure
[ASME PAPER 77-WA/MAT-7] p0177 A78-23372
SPANG, H. A., III
Failure detection and correction for turbofan engines
p0184 A78-23918
SPANGENBERG, R. L.
Helicopter manufacturing technology. II - Drive system and turbine engine technology
p0014 A78-12610
Helicopter manufacturing technology. III - Future manufacturing technologies
p0597 A78-53174
SPANGLER, R. M.
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
SPANGLER, S. B.
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050
SPARKMAN, J. K., JR.
Data relay packages for commercial ships and aircraft
[AIAA 77-1560] p0051 A78-13685
SPARKS, J. C.
A calculator program for analyzing airloads on a wing of arbitrary planform and camber in subsonic flow
[AD-A054180] p0545 N78-30058
SPATOLA, A. A.
Values of diffusion coefficients deduced from the closing times of helicopter-produced clearings in fog
p0590 A78-51933
SPEAKMAN, J. D.
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
SPEARMAN, M. L.
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
Effects of external stores on the aerodynamic characteristics of a 60 deg delta-wing fighter model at Mach 1.60 to 2.87
[NASA-TM-74090] p0081 N78-12033
SPECTOR, S. B.
The impact of urban operations on helicopter noise requirements
p0619 N78-32820
SPEITEL, L. C.
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088
SPENCER, F. A.
Factors affecting the retirement of commercial transport jet aircraft
[NASA-CR-152115] p0316 N78-21092
SPENCER, N. A.
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
SPETH, R. F.
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
SPICKA, H.
Modular radar display units - Versatility in air defence and ATC applications
p0130 A78-20189
SPIEKHOUT, D. J.
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
SPIETH, H.
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
SPIETH, H. H.
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
SPILKER, R. L.
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
SPINGOLA, A.
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
SPIRIDONOV, IU. A.
Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow
p0582 A78-50797
SPIRO, P.
Large electroformed nickel moulds for aircraft parts
p0508 A78-47267
SPONG, E. D.
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130

F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144974] p0552 N78-30131
SPRADLEY, L. H.
Advanced navigation techniques using multiple systems
[AIAA 77-1554] p0051 A78-13652
SPREITER, J. R.
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
SPRENGER, H.
Application of skin technology to turbine blades
[AIAA PAPER 78-285] p0163 A78-20792
SPRIGG, R. G.
An experimental study to determine the reduction in ultimate bending moment of a composite plate due to an internal delamination
[AD-A052662] p0411 N78-25466
SPRING, S. C.
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037
SPRINGSTON, P. S.
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
SPROTBERY, D. E.
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
SPURGEON, J. C.
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088
SQUYERS, R. A.
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
SREENATH, G. S.
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
SRIDHAR, B.
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0114 A78-18464
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0184 A78-23917
SRINATHKUMAR, S.
Eigenvalue/eigenvector assignment using output feedback
[NASA-TP-1118] p0251 N78-18823
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
SRINIVASAN, A. V.
Dynamic analysis of an assembly of shrouded blades using component modes
[ASME PAPER 77-DET-72] p0469 A78-44146
SRIVASTAVA, G. P.
A digital continuously updated two minute mean windspeed indicator for use at airports
p0213 N78-17598
A current weather information display system for use at airports
p0213 N78-17600
SROKOWSKI, A. J.
Development of advanced stability theory suction prediction techniques for laminar flow control
p0449 N78-27068
STABE, R. G.
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
STABENAU, W. P.
The role of system performance analysis in the independent assessment of B-1 navigation software
p0533 A78-49902
STACK, S. H.
GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
STADELMANN, H. J.
F-15 Avionics Intermediate Shop - Militarized design for maintenance and support
p0055 A78-14947
STAEUDLIN, W.
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
STAFFORD, R. O.
Semi-analytic methods for frequencies and mode shapes of rotor blades
p0114 A78-18430
STAGLIANO, T. R.
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
STAHARA, S. S.
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
STAHLIE, T. J.
The analysis of operational mission execution. An assessment of low-altitude performance, navigation accuracy and weapon delivery performance
p0433 N78-26070
STAID, P. S.
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
STAINBACK, P. C.
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
STAKOLICH, E. G.
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143
STALEY, W. W.
Modular packaging approaches
[AD-A048205] p0249 N78-18321
STALKER, R. J.
Driver gas contamination in a high-enthalpy reflected shock tunnel
p0223 A78-26235
STALLINGS, R. L., JR.
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
STAMPFL, R. A.
Modern RF system design for aircraft
p0373 A78-37341
STANEWSKY, E.
The DFVLR Transonic Wind Tunnel Braunschweig - Wall interference corrections for the modified test section and results for the supercritical airfoil CAST 7
p0478 A78-45242
STANISZEWSKI, R.
Future of the electronic equipment for light multipurpose airplanes, crop dusters, combat-trainers, and helicopters. I
p0327 A78-32646
Future of electronic equipment for multipurpose light aircraft, agricultural aircraft, combat trainers, and helicopters. II
p0338 A78-34959
STANLEY, W. L.
The military utility of very large airplanes and alternative fuels

[AD-A053604] p0487 N78-28051
STANSELL, T. A., JR.
Positioning and navigation by satellite
[AIAA 77-1553] p0051 A78-13684
STAPLEFORD, R. L.
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106
STAPLES, K. J.
Current problems of flight simulators for research
p0275 A78-29214
STARIK, M. Y.
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107
STARK, A. E.
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091
STARKEN, H.
A new technique for controlling the exit flow periodicity of supersonic cascades
p0045 N78-11330
STARNES, H. G.
Maintenance of gas turbine accessory equipment
p0597 A78-53175
STARNES, J. H., JR.
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
STARR, C.
Wright-Patterson Air Force Base laser tracker
p0124 A78-19437
STARR, R. F.
Experimental observations of wall interference at transonic speeds
[AIAA PAPER 78-164] p0160 A78-20716
STARTSEV, N. I.
Gas-turbine-engine piping
p0070 A78-15941
STASCHKE, J.
Mechanism of wear in helicopter hydraulic systems
p0178 A78-23439
STASHKOV, V. P.
Effect of nozzle inclination on the efficiency of a single-nozzle microturbine
p0585 A78-51400
STASI, W.
An experimental facility for wind engineering research
[AIAA 78-813] p0297 A78-32367
Heated three-dimensional turbulent jets
[ASME PAPER 77-WA/HT-27] p0330 A78-33179
STASIAK, J.
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
STASZEK, J.
Trailing vortices. II
p0507 A78-47172
STAUDACHER, W.
Wings with controlled separation
[DGLR PAPER 77-028] p0189 A78-24419
STAUFENBIEL, R.
Some nonlinear effects in stability and control of wing-in-ground effect vehicles
p0474 A78-44836
STAUFFER, W. A.
Future trends in aircraft structural design and materials
[AIAA 78-465] p0280 A78-29822
Development of advanced composite structures
p0448 N78-27062
STEARNS, C. A.
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
STEARNS, L. P.
Infrared passbands for clear-air-turbulence detection
p0591 A78-51971
STEELE, W. D., JR.
ARINC communications addressing and reporting system /ACARS/ - The data link that got implemented and why
[AIAA 77-1522] p0008 A78-12263
STEELE, R.
The U.S. Navy bets on V/STOL
p0525 A78-49550
STEELE, W. W.
Multiple laser tracker operations
p0124 A78-19438
STEENKEN, W. G.
Blade row dynamic digital compression program. Volume 2: J85 circumferential distortion redistribution model, effect of Stator characteristics, and stage characteristics sensitivity study
[NASA-CR-134953] p0627 N78-33103
STEERS, L. I.
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
STEERS, S. T.
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
STEFANOV, R. I.
Fatigue of AMg6M sheet with Sprut 5M and VAK coatings in the linear and plane states of stress under high-frequency loads
p0170 A78-22108
Fatigue of AMg6M sheet material with coatings of Sprut 5M and VAK in the linear and plane stressed conditions under conditions of high-frequency loading
p0470 A78-44513
STEFFENS, H. D.
Non-welding joining, cutting and thermal spraying methods
p0046 N78-11395
STEIGER, A. R.
Effects of wind on aircraft cruise performance
[AIAA PAPER 78-1496] p0515 A78-47937
STEIN, G.
Adaptive control laws for F-8 flight test
p0013 A78-12358
STEIN, P. C.
Circumferential seals for use as oil seals
[ASLE PREPRINT 78-AM-3D-2] p0378 A78-38095
STEIN, V.
Special problems in the determination of the radiation characteristics of antennas on aircraft and satellites with the aid of geometric diffraction theory
p0288 A78-31582
The integral equation method - a computational method for diffracted and scattered fields of complicated structures
p0248 N78-18291
The integral equation method - a computational method for diffracted and scattered fields of complicated structures
[ESA-TT-436] p0365 N78-23311
STEINBERG, M. A.
Alloy needs and design - The airframe
p0285 A78-30856
STEINBERG, R.
Automated meteorological data from commercial aircraft via satellite: Present experience and future implications
[NASA-TM-73750] p0212 N78-17558
STEINER, J. C.
Rotary combustion engine hydrocarbon source studies
p0572 A78-50561
STEINER, J. E.
The timing of technology for commercial transport aircraft
p0001 A78-10192
STEININGER, M.
New methods for flight vibration studies
[DGLR PAPER 77-050] p0191 A78-24439
STEINMETZ, G. G.
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
STEINWEG, P.
F-111 depot fuselage fuel tank deseal/reseal procedures
[AD-A050819] p0349 N78-22078
STELSON, T. S.
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092
STENGEL, R. F.
Flying qualities of an aircraft with strong

lateral-directional coupling
[AIAA 78-1361] p0484 A78-46550
Flight investigation and theory of direct side-force control
[AIAA 78-1287] p0541 A78-50194
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065

STEPANENKO, A. P.
Effect of boundary layer suction through slits on the efficiency of turbomachine outlet diffusors
p0284 A78-30572

STEPANOV, G. IU.
Analysis of two-dimensional gas flow in turbomachinery cascades by means of integral equations
p0334 A78-34435
Calculation of the two-dimensional flow of a viscous incompressible fluid through a cascade with separation at the leading edge
p0429 A78-43103
Basic model concepts of fluid mechanics in wing theory
p0580 A78-50752

STEPHENS, D. G.
Comparative vibration environments of transportation vehicles
p0331 A78-33442
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Laboratory and community studies of aircraft noise effects
[NASA-TM-78776] p0618 N78-32815
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874

STEPHENS, H. E.
Application of supercritical airfoil technology to compressor cascades - Comparison of theoretical and experimental results
[AIAA PAPER 78-1138] p0421 A78-41842

STEPKA, F. S.
Liquid-cooling technology for gas turbines review and status
[NASA-TM-78906] p0441 N78-26145

STEPNOV, M. N.
Fatigue resistance of aircraft propeller blades
p0228 A78-27259

STERE, M. D.
Numerical methods for structural analysis
p0328 A78-33003

STERLIGOV, V. L.
Lasers in aviation
p0474 A78-45067

STERN, J. A.
The challenge of advanced fuel-conservative aircraft - A manufacturer's view
[AIAA PAPER 78-362] p0186 A78-24034

STERN, M.
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052

STERNBERG-POWIDZKI, M.
User delay cost model for a terminal control area
p0427 A78-43039

STERNBERG, W. J.
Stores management and data bus systems
p0066 A78-15660

STERNFELD, H., JR.
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903

STETSON, K. A.
Computer-aided holographic vibration analysis for vectorial displacements of bladed disks
p0373 A78-37183

STETTE, G. R.
Access study and simulation of the Marots communication system
p0226 A78-27027

STEVANS, W.
Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109

STEVENS, C. H.
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131

STEVENS, H. L.
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070

STEVENS, R. T.
Computerized test set for the Air Combat Maneuvering Instrumentation
p0068 A78-15700

STEVENS, S. C.
Projected needs of US Army Aviation
p0261 N78-19127

STEVENSON, C. J.
The use of composites in class 1 structures in helicopters
p0105 A78-17254

STEVENSON, D. K.
Specialized computer architectures for computational aerodynamics
p0270 N78-19814

STEVENSON, J. R.
An engine nozzle vibration phenomenon encountered in B-1 flight tests
p0292 A78-32129

STEVENSON, L.
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Tower-related major system development programs
[AD-A054608] p0489 N78-28076

STEVER, H. G.
Considerations affecting the government role in aeronautical R&D
p0052 A78-13846

STEWART, E. C.
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
Quasi-optimal control of a moving-base simulator
p0357 N78-23021
Optimal guidance and control for investigating aircraft noise-impact reduction
[NASA-TP-1237] p0363 N78-23100

STEWART, H. J.
Minimum-time loop maneuvers of jet aircraft
p0473 A78-44830
STEWART, R. L.
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037
STEWART, W. L.
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
STEWARTSON, K.
On moderate injection into a separated supersonic boundary layer, with reattachment
p0582 A78-50896
STICKLE, J. W.
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
STIER, R. A.
An investigation into the nature of aircraft supportability in the CILC environment
[AD-A047226] p0193 N78-15991
STIMPERT, D. L.
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071
STINSON, J. L.
Software design for a Visually-Coupled Airborne Systems Simulator (VCASS)
[AD-A055226] p0566 N78-31133
STINTON, D.
The certification of light aircraft
p0369 A78-36280
STITZER, S. N.
A frequency-selective YIG limiter for airborne FM/CW X-band radar
p0539 A78-50002
STJOHN, M. R.
Avionics maintenance study
[AD-A042568] p0017 N78-10003
STOCK, H. W.
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer exemplified with a transonic wing
[BMVG-FBWT-77-7] p0237 N78-18010
STOCKER, H. L.
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands
[NASA-CR-135307] p0459 N78-27427
STOCKMAN, N. O.
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
STODDARD, F. J.
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071
STOECKLIN, R. L.
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-145207] p0022 N78-10047
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-144984] p0044 N78-11199
STOKIC, D.
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
STOLIAROV, A. A.
Possibilities of phase separation in supersonic two-phase flows
p0426 A78-42630
STOLLERY, J. L.
An intermittent high-Reynolds-number wind tunnel
p0130 A78-20193
An intermittent high Reynolds number wind tunnel
[AIAA 78-766] p0293 A78-32327
STOLP, P. C.
Advanced turboprop propulsion system reliability and maintenance cost
[SAE PAPER 771009] p0182 A78-23841
STONE, A. L.
Numerical solution for airfoils near stall in optimized boundary-fitted curvilinear coordinates
[AIAA PAPER 78-284] p0163 A78-20791
STONE, D. E. W.
Non-destructive inspection of composite materials for aircraft structural applications
p0444 N78-26474
STONE, J. E.
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
STONE, J. R.
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683
An empirical model for inverted-velocity-profile jet noise prediction
[NASA-TM-73838] p0098 N78-13061
On the use of relative velocity exponents for jet engine exhaust noise
[NASA-TM-78873] p0398 N78-24137
STONE, M.
Key issues in application of composites to transport aircraft
p0448 N78-27063
STONE, M. B.
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
STONE, N. W. B.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
STONE, R. H.
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Service experience of composite parts on the L-1011 and C-130
p0218 A78-25197
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
STONECIPHER, H. C.
The next engine decision - Why it takes so long
p0058 A78-15090
STONEHOCKER, G. H.
Flight tests of digital data transmission
p0285 A78-31050
STONER, B. L.
An analytical study of thermal barrier coated first stage blades in a JT9D engine
[NASA-CR-135360] p0198 N78-16054
STONESIFER, F. R.
Fatigue crack growth of titanium fan blades
p0589 A78-51744
STOPKEVICH, V. G.
Fast algorithm for calculating a family of wing structures
p0132 A78-20284
STOTLER, C. L., JR.
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] p0244 N78-18066
STOTTER, A.
Optimization of the cooling system of an air-cooled internal combustion engine
p0419 A78-41510
The spray cooling of gas turbine exhaust gases
p0419 A78-41511
STOTTS, L. B.
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
STOUGH, H. P.
Correlation of model and airplane spin characteristics for a low-wing general aviation

research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
STOUGH, H. P., III
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
STOUT, G. E.
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
STRATTON, W. K.
UTTAS/HLH rotor blade fabrication and testing
p0050 A78-13456
STRAUB, H. H.
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
STRAUSS, W. J.
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125
STRAWE, D. F.
Electromagnetic coupling analysis of a Learjet aircraft in a lightning environment
p0534 A78-49920
STREHL, H.
Glass-fiber data bus systems for signal transmission on board
p0169 A78-21976
STRELKOV, S. P.
Influence of wing-attachment stiffness on the stability of aeroelastic vibrations
p0129 A78-19736
STRENKOWSKI, J. S.
Transient response of a rotor in damped bearings
[ASME PAPER 77-DET-21] p0134 A78-20592
STRING, J.
Cost-effectiveness of flight simulators for military training. Volume 1: Use and effectiveness of flight simulators
[AD-A052801] p0400 N78-24156
STRINGAS, E. J.
High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
STRIUKOV, B. A.
Methodology questions involved in systems engineering for devising an optimum radio-engineering system for trajectory measurements
p0598 A78-53253
STROMBERG, G. F.
Ground test facility for integral rocket ramjets
[AIAA PAPER 78-934] p0519 A78-48454
STRONG, R. B.
Design and operation of an airborne air quality measurement system
p0107 A78-17575
STROTHER, E. F.
Lighter-than-air concepts and recent developments
p0386 A78-39395
STROUD, W. J.
Advanced structural sizing methodology
p0448 N78-27064
STROUT, F. G.
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
STRUCK, H.
A method for the calculation of 2D and 3D transonic interference flows
p0478 A78-45236
STRUNKIN, V. A.
Investigation of the inclination of nozzle blades on the alternating stress level in working turbine blades
p0187 A78-24273
STUART-MITCHELL, R. W.
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
STUART, T. A.
Modeling refinements for the rectified superconducting alternator
p0536 A78-49961
STUBBS, S. M.
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Summary of NASA landing-gear research
p0497 N78-29056
STUKONIS, M.
Corrosion of fuel assembly components of turbine engines and its prevention
p0231 A78-28197
STULOV, V. P.
Boundary layers in dissipative media
p0170 A78-22091
STUMP, C. W.
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115
STUMPFL, S. C.
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
STUPAK, T.
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
STURGEON, R. F.
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
Toward a laminar-flow-control transport
p0449 N78-27071
STURGESS, G. J.
Account of mainstream turbulence for predicting film cooling effectiveness in gas turbine combustors
[ASME PAPER 77-HT-10] p0106 A78-17483
STUTZ, R. G.
Sikorsky YUH-60A UTTAS helicopter flight test program
p0125 A78-19449
SUBRAMANIAN, A. K.
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
SUBRAMANIAN, A. K.
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
SUBRAMANIAN, N. R.
Maslen analysis of power-law shocks in inviscid hypersonic stream
p0224 A78-26481
Flow past nonconical wings with separation
p0377 A78-37775
SUDAKOV, G. G.
The computation of self-similar three-dimensional separated flows
p0127 A78-19657
SUGIYAMA, N.
Research and development of digital jet-engine controls
p0578 A78-50626
SUGIYAMA, Y.
Aerodynamic characteristics of a rectangular wing with a tip clearance in a channel
p0106 A78-17427
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
SUIT, W. T.
Effects of control inputs on the estimation of

stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
SUKHOROSOV, IU. L.
Fatigue resistance of aircraft propeller blades
p0228 A78-27259
SULC, J.
Aircraft noise and its sources
p0283 A78-30351
SULLEBEY, R. K.
Effect of blockage ratio on the turbulent near wake of a bluff body
p0224 A78-26489
SULLIVAN, B. M. S.
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615
SULLIVAN, J. L.
The wear of aluminum-bronze on steel in the presence of aviation fuel
[ASLE PREPRINT 77-LC-5C-1] p0232 A78-28436
SULLIVAN, N.
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
SULLIVAN, P. A.
Duct effects on the heave stability of plenum air cushions
p0592 A78-52616
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029
Duct effects on the dynamic fan characteristics of air cushion systems
[UTIAS-TN-211] p0081 N78-12030
SULLIVAN, R. L.
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
SULTANOV, A. E.
Airworthiness criteria for aluminum alloy covering with uniform corrosion damage
p0175 A78-22737
Influence of the type of corrosion of the aircraft skin on limiting value of the damage
p0383 A78-38907
Criteria of the technical condition of aluminum-alloy coverings with uniform corrosion damage
p0470 A78-44612
Investigation of the residual fatigue life of material D16 ATV under two-step, low-cycle program loading
p0480 A78-46105
SULYMA, P. R.
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134
SULZER, R. L.
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
SUMKA, G. E.
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
SUMMER, C. F., JR.
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
SUMMERFORD, J. W.
Variable speed constant frequency /VSCF/ aircraft electrical power
[SAE PAPER 771002] p0181 A78-23836
SUN, K. C.
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
SUNDARA MURTHY, H.
A free-oscillation test rig for pitch-damping measurements in N.A.L. trisonic wind tunnels
p0224 A78-26487
SUNDARARAJAN, N.
Sensitivity reduction in aircraft control systems
p0285 A78-31034
SUROS, V. I.
The investigation of take-off and landing characteristics of jet shortened take-off and landing aircraft (STOL)
[AD-A044292] p0023 N78-10055
SUSSMAN, M. B.
Non-axisymmetric nozzle design and evaluation for F-111 flight demonstration
[AIAA PAPER 78-1025] p0520 A78-48483
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076
SUTORMIN, V. A.
Operator work capacity during parachutist free-fall
p0517 A78-47978
SUTTER, J. F.
The new medium range jet transport - Need, economics and technology
p0058 A78-15092
SUTTON, C. E.
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
SUTTON, R. C.
The impact of emerging technologies on tactical V/STOL airplane design and utility
[SAE PAPER 770985] p0180 A78-23824
SUZUKI, A.
Experimental verification of a blade cooling system and comparison with design calculation
p0573 A78-50583
SUZUKI, K.
Experimental investigation on the scale effects of gas turbine combustion chambers
p0574 A78-50591
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
SVOBODA, M.
Determining the reliability requirements of aircraft engine control systems during design stage
p0277 A78-29590
SWAIN, R. L.
Ride quality flight testing
p0226 A78-26795
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
SWAIN, E. F.
Aircraft avionics cooling, present and future
p0060 A78-15558
SWALLOW, R.
COMPUTROL - A new technique in image generation
[AIAA 78-1579] p0579 A78-50660
SWANY, M. S.
Model support system interference on zero-lift drag at transonic speeds
[AIAA 78-809] p0296 A78-32363
SWAN, B. E.
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
SWANN, D. A.
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
SWANN, N. R. W.
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
SWANSON, J. A.
Factors affecting the retirement of commercial transport jet aircraft
[NASA-CR-152115] p0316 N78-21092
SWANSSON, N. S.
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
SWARTS, R.
An On-Board Test, Monitor and Maintenance System for the E-3A
p0055 A78-14948
SWEAN, T. F., JR.
The flow about a slender propeller-driven body in a temperature stratified fluid

[AIAA PAPER 78-209] p0161 A78-20746
The flow about a slender propeller-driven body in a temperature stratified fluid
p0154 N78-15432
SWEARINGEN, J. S.
Turboexpanders for energy conservation
p0588 A78-51621
SWEETING, D.
System integration and safety monitoring to achieve integrity in low altitude flight control systems
p0432 N78-26059
SWEETMAN, B.
The quiet battle over aircraft noise
p0058 A78-15167
Backfire - The bogeyman bomber
p0116 A78-18699
Su-19 Fencer
p0481 A78-46494
SWIHART, J. M.
Operations and economics of U.S. air transportation
[AIAA PAPER 78-1545] p0528 A78-49770
SYBERG, J.
Low speed test of a high-bypass-ratio propulsion system with an asymmetric inlet designed for a tilt-nacelle V/STOL airplane
[NASA-CR-152072] p0209 N78-17062
SYRED, N.
Effect of high levels of confinement upon the aerodynamics of swirl burners
p0222 A78-26107
SYSTER, T. E.
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
SZACHNOWSKI, W.
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
SZALAI, K. J.
Flight experience with a fail-operational digital fly-by-wire control system
[AIAA 77-1507] p0007 A78-12253
SZANISZLO, A. J.
Stratospheric cruise emission reduction program
p0040 N78-11077
SZCZECINSKI, S.
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649
SZCZEPANIK, R.
Investigation of the conditions of ingestion of debris into intakes of turbojet engines
p0327 A78-32649
SZELAG, D.
Application of the method of optimal control for elimination of aeroelastic vibrations
p0108 A78-17764
SZETO, R. K.
A computational model for three-dimensional incompressible small cross flow wall jets
[AD-A048450] p0237 N78-18008
SZEWCZYK, V. M.
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
SZUCH, J. R.
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
SZUMANSKI, K.
Optimization of helicopter design. I
p0004 A78-12225
Optimalization of helicopter design. II
p0053 A78-14085

T

TABACHNIKOV, V. G.
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079
TABAK, D.
Emergency air traffic control and cooperative nonzero sum differential games
p0072 A78-16317
TABAKOFF, W.
A study on the mechanism of compressor surge due to inlet pressure disturbances
[AIAA PAPER 78-246] p0162 A78-20769
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Aerodynamic effects on erosion in turbomachinery
p0578 A78-50635
Some effects of temperature on the erosion of metals
p0588 A78-51594
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
TABRIZI, P. A.
Design of long blades by method of constant circulation
p0122 A78-19230
TACK, R. W.
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
TAGIROV, R. K.
Computation of the base pressure in ejector nozzles of different length with zero coefficient of ejection
p0168 A78-21098
Numerical study of flow in axisymmetric Laval nozzles, taking account of overexpansion with flow separation
p0429 A78-43114
TAHA, M. M. A.
The rigidity and performance of a helicopter gearbox with a cantilevered housing and two taper roller bearings
[ASME PAPER 77-DET-103] p0135 A78-20607
TAI, T. C.
Theoretical aspects of dromedaryfoil
[AD-A047150] p0194 N78-16023
TAILLET, J.
Flight application of optical fiber transmission on a Falcon 10 aircraft
[ONERA, TP NO. 1978-105] p0508 A78-47349
TAILLON, N. V.
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
TAKAHARA, K.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
TAKALLU, M. A.
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
TAKAMATSU, Y.
Noise generated by low pressure axial flow fans. III - Effects of rotational frequency, blade thickness and outer blade profile
p0224 A78-26498
TAKEDA, K.
Noise from separated flow of flat plate
p0577 A78-50622
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
TAKEHIRA, A.
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610
TAKIZAWA, K.
A development of advanced radial gas turbine for automobile
p0575 A78-50603
TALANTOV, A. V.
Combustion in flow
p0485 A78-46583

Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow
p0582 A78-50797

TALBOT, P. D.
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113

TALCOTT, N. A., JR.
Calculated heating on the afterbody nozzle of a hypersonic aircraft concept
p0072 A78-16186

TALL, W. A.
Understanding turbine secondary flow
p0041 N78-11097

TALMADGE, R. D.
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114

TAM, C. K. W.
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870

TAMADA, K.
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200

TAMARU, T.
A new air blast type combustor - Design, performance and emission
p0574 A78-50593

TANAKA, A.
Decay and modification of trailing vortex
p0230 A78-27908

TANAKA, H.
A modification of flutter characteristics by changing elastic nature of neighbouring blades in cascade
p0577 A78-50618

TANAKA, M.
An experimental study of the annular diffusers in axial-flow compressors and turbines
p0576 A78-50610

TANAKA, S.
Decay and modification of trailing vortex
p0230 A78-27908

TANASAWA, Y.
A study on a premixed combustor for a vehicular gas turbine
p0574 A78-50592

TANG, M. H.
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053

TANNA, H. K.
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852

TANNEHILL, J. C.
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101

TANNER, M.
Two different theoretical approaches to the base pressure problem in two-dimensional supersonic flow
p0600 A78-53767

TANNER, W. E.
Inertially aided scanning DME for area navigation
p0110 A78-17899

TANSEY, J. P.
A study of the desirability and feasibility of in-flight escape from Army helicopters
[AD-A051153] p0359 N78-23071

TARANENKO, V. T.
VTOL aircraft dynamics
p0598 A78-53428

TARNOGRODZKI, A.
Remarks on design of supersonic wind tunnels
p0369 A78-36216

TAROKH, M.
Design of multivariable PID controllers with application to a gas-turbine
p0072 A78-16308

TARTAGLIONE, J. J.
An analysis of the aircraft trailing vortex system
[AIAA PAPER 78-312] p0185 A78-24013

TATARENCHIK, V. S.
The supersonic flow past cusped wings
p0230 A78-28056
Supersonic flow over sharp-edged wings
p0480 A78-46091

TATE, R. O.
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094

TAUBER, M. E.
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133

TAUBER, T.
A new chip detector
p0058 A78-15158

TAVARES, E. J.
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055

TAYLOR, A. B.
Winglet and long duct nacelle aerodynamic development for DC-10 derivatives
p0496 N78-29049
Advanced aerodynamics and active controls for a next generation transport
p0497 N78-29052

TAYLOR, A. S.
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024

TAYLOR, C. D.
External interaction of the nuclear EMP with aircraft and missiles
p0169 A78-21989

TAYLOR, C. M.
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044

TAYLOR, E.
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112

TAYLOR, J.
Atmospheric turbulence loads on aircraft
p0175 A78-23049

TAYLOR, J. H.
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114

TAYLOR, J. L.
Increasing data productivity with a minicomputer based data acquisition system
p0106 A78-17374

TAYLOR, L. W., JR.
Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Active controls for transports
p0112 A78-18020
A new formulation for the epsilon method applied to the minimum-time-to-climb problem
p0357 N78-23028

TAYLOR, M. R.
High-altitude area navigation (RNAV) enroute simulation
[AD-A049315] p0257 N78-19088

TAYLOR, R. E.
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105

TAYLOR, R. F.
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048

TAYLOR, R. T.
Effects of landing approach methods and separation

intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
TAYLOR, S. A.
The aerodynamic performance of a freely hinged door between two flows
p0586 A78-51464
TAYLOR, W. P.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
Alternate fuels nitrogen chemistry
[AD-A053299] p0411 N78-25240
TEDSTONE, D.
Technical evaluation report on the 51st (A) Specialists' Meeting of the Propulsion and Energetics Panel on Icing Testing for Aircraft Engines
[AGARD-AR-124] p0612 N78-32105
TEICHGRAEBER, R. D.
Real-time simulation as a tool for F-16 operational flight program development and testing
[AIAA 77-1527] p0009 A78-12281
TEICHMAN, H.
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
TELFORD, L. E.
Atmospheric attenuation statistics at 15 and 35 GHz for very low elevation angles
p0592 A78-52360
TELLEGEN, H.
Prediction of operational combat performance
p0435 N78-26086
TEMNIKOV, A. V.
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402
Application of electrical analogy to the substantiation and comparison of some analytical methods of determining temperature fields in gas-turbine blades
p0509 A78-47404
TENA LOPEZ, P.
The new system for processing and presenting radar data in the Air Traffic Control Center of Barcelona
p0383 A78-38997
TENKO, J.
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
TENNYSON, R. C.
Crashworthiness of aircraft fuselage structures
[AIAA 78-477] p0279 A78-29785
TEONY, J.
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces
[AD-A045277] p0096 N78-13049
TEPER, G. L.
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Preliminary Candidate Advanced Avionics System (PCAAS)
[NASA-CR-152026] p0024 N78-10061
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
TEREKHIN, S. N.
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
TEREN, F.
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
Solution of transient optimization problems by using an algorithm based on nonlinear programming
p0184 A78-23909
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
TERENTEV, E. D.
Unsteady boundary layer with self-induced pressure
p0230 A78-28102
Laminar hypersonic wake of a lifting body
p0426 A78-42763
TERENTEV, IU. N.
Investigation of the laminar sublayer on blown porous surfaces
p0074 A78-16484
TERPSTRA, J. E.
Jeppesen charting for area navigation
p0370 A78-36454
TESCH, W. A.
Blade row dynamic digital compression program. Volume 2: J85 circumferential distortion redistribution model, effect of Stator characteristics, and stage characteristics sensitivity study
[NASA-CR-134953] p0627 N78-33103
TESKE, M. E.
The role of atmospheric shear, turbulence and a ground plane on the dissipation of aircraft vortex wakes
[AIAA PAPER 78-110] p0173 A78-22579
Viscous effects in aircraft trailing vortices
p0080 N78-12019
TESSARZIK, J.
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
TESTER, B. J.
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
TEVEROVSKII, B. Z.
Motion of the solid phase of an aerosol at large Reynolds numbers
p0334 A78-34421
THAYER, F. C.
And now 'the deregulators' - When will they learn
p0582 A78-51127
THEBERGE, N.
The impact of a proposed active BCAS on ATCRBS performance in the Washington, D. C., 1981 environment
[AD-A048589/6] p0303 N78-20099
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
THEDFORD, W.
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
THEES, J.
Study of a supercritical profile with oscillating control surface in sub- and transonic flows
[ONERA, TP NO. 1977-136] p0192 A78-24468
THIAVILLE, J. M.
Comparison of a finite difference method with a time-marching method for blade to blade transonic flow calculations
p0011 A78-12295
THIBERT, J.-J.
A new airfoil family for rotor blades
[ONERA, TP NO. 1977-113] p0192 A78-24463
THIEMAN, B. A.
Analysis of monopole antenna arrays on cylinders by the geometrical theory of diffraction
[AD-A055197] p0567 N78-31335
THINESEN, J.
Sweden's latest- and last
p0289 A78-31868
THIRUVENGADATHAN, A.
Visibility observations at Bombay Airport during the winters of 1974-75 and 1975-76 when a skopograph was in operation
p0571 A78-50474
THOMAN, D. C.
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
THOMAS, C. L.
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
Airworthiness evaluation NUH-1H helicopter with global positioning system
[AD-A047971] p0242 N78-18053
THOMAS, D. L.
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004

THOMAS, F.
Aircraft guidance and flight safety - Current and future problems for research and industry
p0569 A78-50263
THOMAS, G.
Role of titanium in aerospace applications
p0123 A78-19402
THOMAS, H. H. B. M.
An introduction to the aerodynamics of flight dynamics
[RAE-TM-AERO-1710] p0152 N78-15057
THOMAS, J. L.
Aerodynamic characteristics in ground proximity
p0390 N78-24055
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
THOMAS, J. W.
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070
THOMAS, R. G.
F-5E/F spin avoidance testing
p0380 A78-38747
THOMAS, W. H.
A clutch for V/STOL
[SAE PAPER 770989] p0180 A78-23826
THOMASON, T. H.
The promise of tilt rotor
p0508 A78-47266
THOMPSON, D. A.
Aircraft use in weather modification
p0056 A78-14995
THOMPSON, D. P.
New materials in the Si-C-Al-O-N and related systems
p0601 A78-53864
THOMPSON, E. H.
Peace Rhine - A digital Weapon Control System for the F-4 aircraft
p0532 A78-49876
THOMPSON, G. R.
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
THOMPSON, H. D.
Some laser velocimeter measurements in the turbulent wake of a supersonic jet
p0001 A78-10463
THOMPSON, H. E.
Development and test of an airborne range instrumentation system /ARIS/
p0105 A78-17371
THOMPSON, J. R.
Initial development of a tactical system for dispersing supercooled stratus
[AD-A056570] p0635 N78-33677
THOMPSON, M. C., JR.
Fading at 9.6 GHz on an experimentally simulated aircraft-to-ground path
p0524 A78-49439
THOMPSON, P. A.
Real-gas version of the gasdynamic formulas of Saint-Venant and Wantzel
p0570 A78-50304
THOMPSON, R. E.
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
THOMPSON, V. S.
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
THOMSON, J. M.
Susceptibility testing of airborne equipment - The way ahead
p0384 A78-39086
THOMSON, T. A.
The theoretical performance of a straight-bladed, vertical axis wind turbine
[ATN-7802] p0445 N78-26561
THRASHER, D. F.
Nonlinear dynamic-aerodynamic interaction
[AIAA 78-1346] p0485 A78-46563
THUN, E.
Integration, postdevelopment, and life tests in the case of the closed-loop simulation of the MRCA flight control system
p0417 A78-41023
THURSTON, D. B.
Design for flying
p0371 A78-36498
THURSTON, T. S.
Fabrication and test of a fluidic fuel-control and bleed-air-load-control system for gas turbine engines
[AD-A049039] p0265 N78-19163
TIBBETTS, J. G.
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870
TICE, J. D.
Gas turbine engine fuel from synthetic crude
p0461 A78-43416
TICHTINSKY, H.
Methods available to ONERA for analysis of combustion chambers
[ONERA, TP NO. 1978-93] p0507 A78-46915
TIJDEMAN, H.
Investigations of the transonic flow around oscillating airfoils
p0383 A78-38978
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
TILCH, H. J.
Civil components program "Wing Section'. Materials selection
[BMFT-FB-W-77-37] p0351 N78-22091
TIMOFEEV, A. P.
Optimization of the structure of a multibulkhead large-aspect-ratio wing
p0293 A78-32275
TIMOFEEVA, L. N.
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
TIMOSHENKO, V. I.
Mutual effect of thermochemical destruction of the surface and viscous interaction for hypersonic flow past a sharp cone
p0599 A78-53508
TINDELL, R. H.
Advanced engine-inlet matching for a V/STOL 'B' fighter
[AIAA PAPER 78-925] p0462 A78-43503
TING, L.
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
TINOCO, E. N.
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
TISHCHENKO, V. N.
Irrotational flow around a spherical segment
p0588 A78-51688
TJELLE, P. A.
High-voltage power supply problems and design techniques
p0065 A78-15654
TJOKROSETIO, H.
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
TKACHENKO, I. P.
Hydromechanical properties of an isolated wing moving above a screen
[AD-A044692] p0091 N78-12379
TKHOREVSKAIA, ZH. D.
Investigation of the weldability of heat-resistant titanium alloys
p0598 A78-53324
TOBAK, M.
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics
[NASA-TM-78471] p0253 N78-19056
TOBER, G.
Detectability of flaws in boron and carbon composite parts
p0444 N78-26477

TODA, M.
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0114 A78-18464
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0184 A78-23917
TODD, B. S.
JT9D jet engine performance deterioration
p0446 N78-27050
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
TODD, H.
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
TOKAR, E. N.
Influence of constrained arrestors on the operation of gyroscopic stabilizers
p0585 A78-51355
TOKAREV, V. V.
Mechanism of pulsating combustion of the liquid fuel fed to the airflow through the circulation zone behind the flame stabilizer
p0581 A78-50788
TOLAND, R. H.
Rotor design implications for composite material properties
[UCRL-80117] p0553 N78-30182
TOLOKNOV, V. I.
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
TOM, M.
Air-to-air designate/track with time sharing
p0538 A78-49977
TOMAINE, R. L.
VALT parameter identification flight test
p0480 A78-45439
TOMAN, D. J.
The Interim Standard Microwave Landing System
p0112 A78-17915
TOMASZEWICZ, J.
Application of light-emitting diodes /LEDs/ in aircraft analog indicators
p0176 A78-23059
TOMBACH, I.
Some aspects of aircraft wake behavior near the ground
p0055 A78-14960
Aircraft vortex wake decay near the ground
[AD-A042478/8] p0019 N78-10024
TOMINAGA, T.
Broadband noise in axial-fan blade cascade
p0579 A78-50650
TOMLINSON, H. M.
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
TOMLINSON, J. G.
Pollution reduction technology program for turboprop engines
p0039 N78-11069
TOMLINSON, L. R.
Design and implementation of mode control logic in digital autopilots
[AIAA 77-1488] p0005 A78-12238
TOMMERDAHL, J. B.
Design and operation of an airborne air quality measurement system
p0107 A78-17575
General aviation avionics equipment maintenance
[NASA-CR-145342] p0398 N78-24132
TOMSHIN, V. K.
Organization of a programmed matrix-operation system in an airborne digital computer
p0192 A78-24585
TONNESEN, J.
Some experiments on instability of rotors supported in fluid-film bearings
p0134 A78-20593
TOOR, P. M.
Effect of initial flaw shapes on cracks emanating from fastener holes under combined stress
p0332 A78-33700
TOPLIS, A. F.
The Dash 7 - An aircraft for today's environment
p0004 A78-12213
STOL system fuel savings - Ground and air
p0287 A78-31312
TOPPING, B. F.
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
TORELLA, G.
Calculation of the performance of a turbine engine in the off-design condition
p0120 A78-19057
Use of a field bench for testing turbojet engines
p0527 A78-49731
TORGOV, V. N.
Effect of long service on the fine structure of the surface of gas turbine engine rotor blades
p0470 A78-44522
TORREGIANI, V. G.
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
TORRI, A.
Technical-analytical assistance now even in the field
p0119 A78-19053
TRABOLD, E. L.
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Study to develop improved fire resistant aircraft passenger seat materials, phase 1
[NASA-CR-152056] p0036 N78-11042
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
TRACHUK, V. S.
Elastic deformations of rapidly-rotating prismatic mirrors
p0168 A78-21374
TRAGESER, J. H.
Non-volatile memory system for severe environment flight recorders
p0532 A78-49872
TRAN, C. T.
Dynamic stability of a two blade rotor
[ONERA, TP NO. 1978-32] p0291 A78-32037
TRANKLE, T. L.
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
TRANOVICH, V. A.
Solving the problem of numerical construction of a model of similar rigidity to the initial structure as a problem of quadratic programming
p0164 A78-20864
TRAPPMANN, K.
The state of development of ceramic components for gas turbines
[DGLR PAPER 77-072] p0116 A78-18703
TRAYBAR, J. J.
Aerodynamic and hovering control of LTA vehicles
[AD-A045315] p0082 N78-12047
TRAYLOR, S., JR.
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118
TRECA, M.
The present status and evolution of the inspection of carbon composite aircraft structures in France
p0444 N78-26478
TREDICI, T. J.
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034

Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
TREMPLER, W.
Experience with the VOR navigation system in the German Democratic Republic. IV
p0051 A78-13502
The distance measurement procedure DME. I
p0469 A78-44198
TRIEBSTEIN, H.
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
TRIMBLE, M. H.
The need for improved materials in integral aircraft fuel tanks
p0217 A78-25177
TRIMMER, L. L.
Supersonic aerothermal testing - A new requirement
[AIAA 78-773] p0294 A78-32333
TRIPP, M. W.
Modeling refinements for the rectified superconducting alternator
p0536 A78-49961
TRN, R. H.
Flutter of control surfaces with structural nonlinearities
[AD-A045221] p0099 N78-13073
TROADEC, J.-P.
Current and future fuels for transport aircraft
p0116 A78-18669
The reduction of the annoyance caused by subsonic jet aircraft noise
p0343 A78-35975
TRONCA, A.
Current status and examples of nondestructive testing for aircraft materials
p0119 A78-19055
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy
p0444 N78-26468
TROSHCHENKO, V. T.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
TROUT, A. M.
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
TRUNIN, I. P.
Statistical analysis and prediction of the heat-resistance characteristics of cast alloys for gas-turbine engine /GTD/
p0481 A78-46108
TSAO, C. K. H.
SHF/EHF satellite communication terminal
[AIAA 78-581] p0328 A78-32921
TSAO, G. K. H.
Dual band airborne SATCOM terminal
p0537 A78-49972
TSEITLIN, V. I.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
TSENG, K.
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036
TSEPLIAEVA, T. P.
Designing the elements of a structure of a given guaranteed indestructibility
p0131 A78-20259
TSIBIZOV, N. I.
Fabrication and assembly of cable strands for aircraft engines
p0599 A78-53432
TSING, K. P.
Aeronautical knowledge, selected articles
[AD-A051710] p0367 N78-23986
TSIREL, V. S.
Study of magnetic noise in the Ka-26 helicopter
p0385 A78-39188
TSUBOI, T.
Temperature profiles of rotating cooled blade
p0573 A78-50581
TSUCHIYA, F. Y.
Noise control analysis for gas turbine installations
p0577 A78-50621
TSUGE, A.
Silicon nitride ceramics for gas turbine engines
p0578 A78-50630
TSVETKOV, L. G.
Method for solving problems of flow past a wing with fuselage bounded by an ideal fluid flow
p0220 A78-25585
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
TSYGANOV, V. P.
Method for evaluating the effect of the mass of the mechanism for actuating high-speed pneumatic machines for the pressure working of materials on the motion parameters of machine parts
p0132 A78-20288
TSYPULEV, IU. V.
Experimental investigation of the temperature field in a plane channel carrying a stratified turbulent air stream
p0227 A78-27139
TUBB, D. G.
Specifications for IDAMST software
[AD-A047163] p0198 N78-16049
TUCKER, P. B.
Captive carriage vibration of air-to-air missiles on fighter aircraft
p0587 A78-51470
TUGAZAKOV, P. IA.
Solution of the problem of three-dimensional flow past a delta wing with subsonic edges by a modification of the Lax-Wendroff method
p0128 A78-19696
TULLIS, R. H.
Fuel conservation merits of advanced turboprop transport aircraft
[NASA-CR-152096] p0316 N78-21095
TULLOCH, J. S.
Modified helicopter icing spray system evaluation
[AD-A055039] p0561 N78-31091
TUMANOV, A.
Increasing the survivability of combat aircraft
[AD-A045910] p0140 N78-14038
TUMAR, N. V.
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
TUNNAH, B. G.
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
TUPPER, N. G.
Opportunities for cost-affordable titanium aerospace structures
p0589 A78-51839
TURCO, R. P.
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774

TURELLI, R. R.
An experimental investigation of steady asymmetric vortex shedding from a slender body of revolution at high angles of attack
[AD-A048370] p0253 N78-19062
TURI, A.
Numerical study of transonic profiles
p0120 A78-19061
TURK, R. L.
Approach for identifying avionics flight software operational support requirements - PAVE TACK an example
p0533 A78-49900
TURKOWSKI, L.
Characteristics of flow past fuselages and wing-fuselage systems of gliders
p0369 A78-36203
TURNAGE, W. T.
A standard programmable I/O for the advanced aircraft electrical system power control set
p0535 A78-49936
TURNER, E. W.
An exposition on aircraft response to atmospheric turbulence using power spectral density analysis techniques
[AD-A046108] p0143 N78-14057
TURNER, M. J.
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2825] p0306 N78-20116
TURRIZIANI, R. V.
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
TURSKII, IU. I.
Investigation of high-temperature properties of aircraft oils
p0334 A78-34322
TURUTO, C.
Smoke and nitric oxide control for gas turbine engines burning light/heavy fuels
p0575 A78-50598
TUTHILL, W. A.
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711
TUTTLE, D. B.
Landing systems - The Navy viewpoint
p0281 A78-30097
TYLER, J. S.
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
Area navigation systems and procedures
p0316 N78-21091
TYMCZYSZYN, J. J.
Vortex attenuation flight experiments
p0081 N78-12028
TYRAN, K.
Chevron cutting: Experiment with new runway mixtures
[NASA-TM-75448] p0616 N78-32427
TYTULA, T. P.
A method for validating missile system simulation models
[AD-A055689] p0613 N78-32169
TYZNER, K.
Effect of noise on life of aircraft structure and design of parts resistant to acoustic loads
p0283 A78-30352
TZENG, C. P. J.
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080

U

UCER, A. S.
Simulation of single and double-stage reciprocating compressor systems with allowance for frictional effects and heat transfer
p0420 A78-41512
UCHAEV, IU. P.
Optimal aperture-shape for an antenna array
p0228 A78-27406
The optimum shape of the aperture of an antenna array
p0598 A78-53257
UCHIYAMA, M.
The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
UEHARA, S.
Minimum-time loop maneuvers of jet aircraft
p0473 A78-44830
UHLHORN, R. W.
Fiber optic development for tactical fighter applications
p0534 A78-49906
UNDERWOOD, P. N.
Low frequency combustion instability in augmentors
p0321 N78-21138
UNDERWOOD, P. N., JR.
Low frequency augmentor instability study
[AIAA PAPER 78-996] p0464 A78-43543
UNDERWOOD, J.
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
UNDERWOOD, T. E.
A high speed fault tolerant multiprocessor for radar data processing
[AIAA 77-1482] p0009 A78-12277
UNTERREINER, K.-H.
Use of and experience with simulation in the development of the VFM 614 and the VAK 191
[DGLR PAPER 77-083] p0289 A78-31942
URASEK, D. C.
Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109
URBAN, V. V.
Numerical simulation of the unsteady two-stage axisymmetric efflux of a gas into an immersed space
p0586 A78-51448
URIE, D. M.
Piloted flight simulation for active control design development
[AIAA PAPER 78-1553] p0528 A78-49771
Development and flight evaluation of active controls in the L-1011
p0496 N78-29051
USELTON, B. L.
Sting effects as determined by the measurement of pitch-damping derivatives and base pressures at Mach number 3
[AIAA 78-830] p0297 A78-32381
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
USKO, J. N.
Development of a frangible approach light
[AD-A043859] p0043 N78-11122
USPENSKII, O. A.
Contribution to the theory of rotational swirling flows of an ideal gas in Laval nozzles
p0342 A78-35910
USUI, H.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions. Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
UVAROV, V. S.
Aircraft radar systems
p0377 A78-37873
UYAMA, H.
Study on fan noise characteristics and fan noise abatement technology
p0060 A78-15406

A study of fan-rotating noise reduction
p0577 A78-50620
UYGUR, E. M.
Dynamic nondestructive testing of materials
p0444 N78-26470

V

VACHAL, J. D.
Application of laminar flow control to large subsonic military transport airplanes
[AIAA PAPER 78-95] p0172 A78-22571
Wing planforms for large military transports
[AIAA PAPER 78-1470] p0528 A78-49786
Application of laminar flow control to large subsonic military transport airplanes
[AD-A052422] p0394 N78-24098
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088
VADYAK, J.
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
VAGNER, E. T.
Laser and optical methods of monitoring in aircraft construction
p0281 A78-30123
VAHL, W. A.
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
VAHLBERG, C. J.
High-accuracy three-dimensional image reconstruction for an airborne line-scanning system
p0538 A78-49988
VAICAITIS, R.
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
VAIDYA, P. G.
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
VAILLANT, R.
Prediction of the ascending speeds of gliders in thermal convection over a plain
p0177 A78-23398
VAKHITOV, A. F.
The Mi-6A helicopter
p0221 A78-26000
VALENSI, J.
Aerodynamic characteristics of a wing profile in nonstationary motion
p0053 A78-14071
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
VALIAEV, V. I.
Approximate wind-tunnel simulation of the dynamics of a system composed of a body with a trailing cable
p0165 A78-20902
VALORI, R.
Effectiveness of the real time ferrograph and other oil monitors as related to oil filtration
[AD-A049334] p0308 N78-20134
VAN DAM, C.
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
VAN DE MOESDIJK, G. A. J.
Aircraft motions in moving air
p0425 A78-42449
VAN DEN BROEK, M.
Digital avionics support - A retrospective view of the future
p0533 A78-49903
VAN DER HARTEN, R. J.
An electronic integrated pilot display is evaluated in North Sea operations
p0114 A78-18428
VAN DER KRAMER, M.
Clearance of new stores for military aircraft - An overview of the techniques used
p0074 A78-16597
VAN DER VAART, J. C.
Aircraft motions in moving air
p0425 A78-42449
VAN DER VET, W. J.
Testing of coatings and materials for jet engine components in simulated operational environments
p0468 A78-44115
VAN EGMOND, J. A.
The design and aerodynamic characteristics of an 18% thick shock-free airfoil /NLR 7501/
[NRL-MP-78016-U] p0477 A78-45228
VAN ESELTINE, R. T.
Waves and wave resistance for air-cushion vehicles with time-dependent cushion pressures
p0591 A78-51968
VAN HOLTEN, T.
Asymptotic theory of the swept wing
p0052 A78-14053
VAN ORDEN, J. M.
A close look at 7475 and 2024 aluminum for aircraft structures
p0108 A78-17699
VANABKOUDE, J. C.
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
VANAKEN, J.
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
VANCAMP, V. V.
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
VANCE, J. M.
Squeeze film damper characteristics for gas turbine engines
[ASME PAPER 77-DET-23] p0226 A78-26796
VANDAM, C. P. G.
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
VANDERBILT, D.
Inviscid flow through wide-angle diffuser with actuator disk
p0597 A78-53095
VANDERHARTEN, R. J.
Some aspects of offshore operations in the Netherlands
p0262 N78-19135
VANDERPLAATS, G. N.
LASTOP: A computer code for laser turrets optimization of small perturbation turrets in subsonic or supersonic flow
[AD-A049272] p0255 N78-19076
VANDERVEER, J. R.
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
VANDERWIER, J.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
VANDERWILT, M.
Flight-path reconstruction of symmetric nonsteady flights
[NLR-TR-76133-U] p0243 N78-18056
VANDEVER, W. H., JR.
The DAIS Executive - An introduction
p0534 A78-49932
VANDYKE, P.
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048
VANEGMOND, J. A.
Collection of supercritical aerofoils obtained with the NLR hodograph method
[NLR-TR-75115-U] p0237 N78-18009

VANPOSSEN, G. J., JR.
Liquid-cooling technology for gas turbines review and status
[NASA-TM-78906] p0441 N78-26145
VANGOOL, M. F. C.
Flight test of stick force stability in attitude-stabilized aircraft
[NLR-MP-77015-U] p0246 N78-18080
VANHAMERSVELD, J.
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
VANLEEUWEN, H. P.
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199
VANNUNEN, J. W. G.
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0306 N78-22042
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
VANWYK, A. J.
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095
VARNER, M. O.
Development of improved 3DOF analysis capabilities in the AEDC-VKF continuous wind tunnels
[AD-A053939] p0450 N78-27088
VASHCHENKO, V. K.
Economic problems of determining the durability of aircraft engines
[AD-A044672] p0088 N78-12096
VASILENKO, V. T.
Investigation of the efficiency of dehydrating jet fuel in the monocoque fuel tank of an AN-24 aircraft while the aircraft is on the ground
p0131 A78-20273
VASILEV, IU. V.
Procedure for computerizing stability calculations during establishment of force element dimensions for thin-wall aircraft construction
p0133 A78-20301
VASIN, V. A.
Nonlinear mathematical modeling of unstead[illegible]w past a lifting propeller
p0585 A78-51379
VASS, E. R.
Omega Navigation System - Present status and plans 1977-1980
p0112 A78-17916
VATAZHIN, A. B.
Electrical fluctuations in turbulent electrogasdynamic flows
p0171 A78-22364
VATSURO, A. E.
Study of m[illegible]tic noise in the Ka-26 helicopter
p0385 A78-39188
VAUCHERET, [illegible]
Prediction of the aerodynamic characteristics of an aircraft on the basis of the comparison of results for a calibration model in various large transonic wind tunnels
[ONERA, TP NO. 1978-22] p0386 A78-39579
Determination of nonlinearities of dynamic stability
[ONERA, TP NO. 1978-52] p0479 A78-45280
Prediction of aerodynamic characteristics of an aircraft from a correlation of results on a calibration model tested in various large transonic tunnels
p0436 N78-26088
VAUGHAN, V. L., JR.
Light airplane crash tests at impact velocities of 13 and 27 m/sec
[NASA-TP-1042] p0020 N78-10034
VAUGHN, R. L.
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320
VAZHENINA, T. D.
Determination of the frequency characteristics of an air-intake duct
p0129 A78-19730
VEAUX, J.
Landing gear kinematics
p0468 A78-43762
VEDIN, A. N.
Operational experience with long-safe-life gas-turbine engines having shrouded turbine rotor blades
p0426 A78-42742
VEHLOW, C. A.
Experimental investigation of gust response of hingeless helicopter rotors
[AD-A054752] p0552 N78-30142
VEITENGRUBER, J. E.
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
VELICHKIN, V. A.
Nonlinear model of the wind effect in problems involving flight vehicle dynamics
p0327 A78-32607
VELKOPP, H. R.
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
VELUPILLAI, D.
Mirage 2000 - Dassault's better delta
p0523 A78-49169
VENKATARAMANI, K. S.
The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098
VENKATESAN, C.
On the application of dual-phase damping to landing gears
p0123 A78-19405
Comparison of linear and nonlinear dampers for landing gears
p0590 A78-51947
VENTURINO, M. S.
Radar beacon tracking with downlinked heading and airspeed
p0225 A78-26780
VENUGOPAL, G.
A digital continuously updated two minute mean windspeed indicator for use at airports
p0213 N78-17598
A current w[illegible]ther information display system for use at airports
p0213 N78-17600
VERDIER, C.
Characterization of smokes emitted by turbojet engines
[ONERA, TP NO. 1977-172] p0130 A78-20145
VERDOUW, A. J.
Performance of the Vortex-Controlled Diffuser /VCD/ in an annular combustor flowpath
p0572 A78-50574
VERMURI, R. S.
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
VERNEKAR, K. G.
Estimated temperature corrections for the Menaka-II meteorological rocket payload
p0479 A78-45341
VERONIS, G.
Thirty years of fluid dynamics
p0585 A78-51280
VERSAW, E. P.
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
VESSER, B.
Calibration of gas turbine instrumentation
p0105 A78-17361
VESTIAK, A. V.
Stress-strain state of simply-supported

three-layer trapezoidal plates
p0168 A78-21205
VETROV, A. N.
Probabilistic estimate of the creep-rupture strength of aircraft gas-turbine rotor blades
p0338 A78-35129
VETROV, V. I.
Experimental investigation of the thermoacoustic fluctuations in heated channels at supercritical pressures
p0580 A78-50780
VETSC, G. J.
Digital multimode fly-by-wire flight control system design and simulation evaluation
[AIAA 77-1508] p0007 A78-12254
VICKERS, T. K.
The short-haul jet designed with ATC in mind
p0587 A78-51516
VICROY, D. D.
The effect of landing system coverage and path geometry on lateral position errors at the runway threshold
[NASA-TM-78744] p0451 N78-27100
VIDAL, R. J.
Experiments on supercritical flows in a self-correcting wind tunnel
p0295 A78-32345
VIEBCKE, B.
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
VIGNERON, Y. C.
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
VIGOVSKIY, V. T.
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
VIKTOROV, B. V.
Use of the singular perturbation method to investigate automatic control systems
p0163 A78-20802
VILDGRUBE, L. S.
Helicopters: Calculation of integral aerodynamic performance and air-technical data
p0281 A78-30124
VILENKIN, A. V.
Estimating the service life of rolling contact bearings when synthetic oils are used
p0334 A78-34324
VILKHOVCHENKO, S. D.
Hydrodynamic effect on a contour produced by an ideal incompressible flow of constant vorticity
p0274 A78-28956
VILLE, J. P.
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152
VINCENT, R. P.
Precision approach monitoring and guidance using interferometer techniques
p0587 A78-51551
VINKLER, A.
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
VINOGRADOV, B. S.
Thrust characteristics of thrust vector control systems with blowing injection of chemically nonreactive gases
p0187 A78-24254
VINSON, P. W.
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
VISHNIAKOVA, T. P.
Study of the influence of the composition of additions on the antioxidation stability of jet fuels
p0418 A78-41202
Investigation of phenolic antioxidants in the stabilization of T-7 fuel
p0474 A78-45001
Influence of compositions of NG 22-46 additive with phosphorus-containing compounds on the antioxidative stability of T-7 fuel
p0598 A78-53371
VISWANATHAN, S. P.
An analysis of the flutter and damping characteristics of helicopter rotors
p0030 N78-10111
VLADIMIROV, N. I.
Technical exploitation of aircraft /2nd revised and enlarged edition/
p0014 A78-12606
VLASOV, E. V.
Aerodynamic noise of gliders
p0328 A78-32971
VLASOV, V. I.
Calculation of rarefied-gas flow past a plate at angle of attack
p0127 A78-19652
VLIEGER, H.
Prediction of fail-safe strength of realistic stiffened skin aircraft structures
p0332 A78-33769
VOGEL, J. W.
Flyover noise - Measurement and analysis
p0124 A78-19441
VOGLER, R. P.
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
VOGT, G. L.
The AN/APX-100/V/ transponder
p0537 A78-49971
VOIGT, A. A.
Electric flight control systems - Applicable now
p0067 A78-15688
VOIT, F. IA.
Preliminary experience with the use of the Yak-40 aircraft in studies of cloud physics and artificial modifications
p0370 A78-36483
VOJIR, W.
Future aerospace digital signal processing concepts
[AIAA 77-1389] p0014 A78-12661
VOLK, G. C.
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-FRC-10113-1] p0265 N78-19166
VOLK, W.
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
VOLLMERS, R.
A modular side looking airborne radar to fulfill a multitude of surveillance missions
p0587 A78-51543
VOLMIR, A. S.
Dynamics of gas turbine engine blades under unsteady flow
p0427 A78-42872
Outline of aeroelastic phenomena
p0204 N78-17003
VOLOBUEV, V.
The technical concepts behind the IL-62M /8/ landing gear
p0371 A78-36622
VOLOKH, I. N.
Improved design for two-sided bolted joints under symmetric loading
p0131 A78-20262
VOLOSHCHENKO, A. P.
Automated vibrating bench for studying fatigue in gas turbine blades with programmed changes in load and temperature
p0228 A78-27267
VOLPE, G.
Two element airfoil systems designs - An inverse method
[AIAA PAPER 78-1226] p0476 A78-45150
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
VOMASKE, R. F.
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
VONBAUR, R.
Civil components program "Wing Section'. Wing

structure parameter study
[BMFT-FB-W-77-30] p0350 N78-22088
VON GLAHN, U.
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
VON SCHLACHTA, K.
On the possibility of classifying radar targets with a coherently measured echo signal
p0293 A78-32308
VONGLAHN, U. H.
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
VONRIESEMANN, W. A.
Analysis of the engine fragment threat and the crush environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078
VOOGT, W.
Aerodynamic design of thick, supercritical wings through the concept of equivalent subsonic pressure distribution
[NLR-MP-78011-U] p0477 A78-45230
VOORHEES, C. G.
Gates Learjet Model 28/29, the first 'Longhorn' Learjet
[AIAA PAPER 78-1445] p0510 A78-47901
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
VORBRICH, K.
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
VOROBEV, V. G.
Aviation control system devices
p0529 A78-49850
VOROBEV, V. M.
Numerical calculation of magnetic levitation systems
p0600 A78-53805
VORONIN, V. G.
The experimental determination of the parameters of a mathematical model of an aircraft passenger compartment as a control plant with respect to air temperature
p0175 A78-22652
Experimental determination of parameters of mathematical model of airplane cabin as regulated object with respect to air temperature in the cabin
p0518 A78-48234
VORONTSOV, N. M.
Determination of velocity fields of displacement and deformation during the forming of thin and very thin profiles
p0132 A78-20292
VORTHEIER, P. W.
Multiband antenna system for tactical aircraft
[AD-A049699] p0325 N78-21363
VOSKRESENSKII, G. P.
The supersonic flow past cusped wings
p0230 A78-28056
Supersonic flow over sharp-edged wings
p0480 A78-46091
VOSTEEN, L. F.
Composite structures for commercial transport aircraft
p0337 A78-34901
Composite structures for commercial transport aircraft
[NASA-TM-78730] p0457 N78-27183
VRONSKII, G. V.
Use of a fast Fourier transformation and the Monte Carlo method to calculate repeatibility of load and fatigue damage of aircraft structural elements under vibration excited by external stationary random loads
p0166 A78-20932
VUKELICH, S. R.
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
VUKOBRATOVIC, M.
New method of dynamic stabilization of flying vehicles in the case of large perturbations
p0073 A78-16328
VYSHINSKII, V. V.
Obtaining exact solutions for shock-free flow past a symmetrical airfoil profile with a local supersonic zone
p0127 A78-19668
VYSLOUKH, V. A.
Application of the finite element method to the stability analysis of triangular plates in supersonic flow
p0164 A78-20866
VYTCHIKOV, IU. S.
Solution of an adjoint problem of steady-state heat transfer associated with the cooling of gas-turbine blades, by means of a quasi-analog/digital system
p0508 A78-47402

W

WADCOCK, A. J.
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887
WADE, D. K.
Thermal flux protection for aircraft
p0072 A78-16267
WADIA, A. R.
A least square finite element technique for transonic flow with shock
[AIAA PAPER 78-328] p0186 A78-24022
WAECHTER, J. R.
An application of the global positioning system to search and rescue and remote tracking
p0110 A78-17898
WAGDI, M. N.
A proposed scheme for maneuver-dependent control of stability
p0050 A78-13417
Stability augmentation by eigenvalues control and model matching
p0507 A78-46965
WAGGONER, E. G.
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
WAGNER, B.
Remarks on conical supersonic wings with subsonic leading edges
p0333 A78-34016
Experimental investigations concerning the stalling characteristics of airplanes with T-tails
p0418 A78-41394
Note on the spanwise quadrature in lifting-wing calculations
p0467 A78-43690
WAGNER, J. H.
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118
WAGNER, K.
Icing on helicopters
[RAE-LIB-TRANS-1911] p0257 N78-19095
WAGNER, R.
A millimeter wave surveillance radar for RPVs
p0107 A78-17548
WAGNER, R. A.
Helicopter noise regulations: An industry perspective
p0618 N78-32818
WAHBA, N. N.
Pressure inside a room subjected to sonic boom
[UTIAS-TN-207] p0345 N78-22029
WAIDELICH, J. A.
Wide-angle, multiviewer infinity display design
[AD-A051158] p0364 N78-23108
WAINAUSKI, H. S.
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
WAKAI, I.
Study on problems of terminal site location

p0369 A78-36323
WAKEFIELD, C.
Assessment of dynamic coordinate alignment for elastic aircraft
p0538 A78-49987
WALBY, T. F.
In search of a better approach concept - MLS and HUD
p0134 A78-20479
WALDER, A.
Cobalt-base alloys produced by powder metallurgy for compressor and turbine disks
[ONERA, TP NO. 1978-7] p0386 A78-39582
WALDRUP, H. H.
The Bell Model 222
[SAE PAPER 770951] p0179 A78-23802
WALKER, C. L.
Research needs for U.S. Army aircraft propulsion
[AIAA PAPER 78-45] p0171 A78-22558
WALKER, G. A.
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
WALKER, G. G.
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
WALKER, H. J.
An annular wing
[NASA-CASE-FRC-11007-1] p0253 N78-19055
WALKER, S. N.
Performance-optimized horizontal-axis wind turbines
p0170 A78-22232
WALKLEY, K. B.
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
WALLACE, E. L.
Use of onboard computerized flight test analysis systems
[AIAA PAPER 78-1462] p0512 A78-47912
WALLACE, F.
Analog versus digital null-steering controllers
p0227 A78-27039
WALLACE, R. M.
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
Titanium damage tolerant design data for propulsion systems
[AD-A053252] p0442 N78-26202
WALLENSTEIN, M. H.
Acceptance testing of the JTIDS Class II terminal by augmented minicomputer
[AIAA 77-1415] p0014 A78-12677
WALLER, D. A.
Life cycle costing, a design tool - Nuances and caveats
p0060 A78-15554
WALLIN, J. C.
Engine non-containment: UK risk assessment methods
p0025 N78-10072
WALLISCHECK, K.
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
WALMSLEY, P.
Airports in the year 2000 - Suggestions for improving capacity
p0570 A78-50435
WALSH, B.
Design considerations for ECM systems in attack and fighter aircraft
p0054 A78-14928
Advances in aircraft efficiency
p0112 A78-18022
The multirole cruise missile
p0600 A78-53716
WALSH, J. P.
Civil and military design requirements and their influence on the product
p0264 N78-19151
WALSH, T. M.
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0433 N78-26066
WALTER, M. J.
747 Shuttle Carrier Aircraft/Space Shuttle Orbiter mated ground vibration test - Data via transient excitation and fast Fourier transform analysis
[SAE PAPER 770970] p0179 A78-23815
WALTERS, J. J.
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101
WALTERS, M.
V/STOL aerodynamic technology assessment
[AD-A054797] p0607 N78-32069
WALTHER, H.
Surface corrosion evaluation by relative magnetic susceptibility measurements
p0443 N78-26466
WALTON, J. D.
A feasibility study of a manual bomb release while in a turn
[AD-A048882] p0261 N78-19123
WALZER, P.
Development of ceramic components for an automotive gas turbine
p0578 A78-50632
High-temperature ceramics for automobile gas turbines
[NASA-TM-75457] p0614 N78-32264
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
WANG, C. D.
Adaptive phased arrays for tactical communication systems
p0227 A78-27040
WANG, G.
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance study. User's manual
[AD-A045625] p0091 N78-13001
WANG, H.-Y.
Pressure dependence of turbulent jet noise
p0470 A78-44357
WANG, K. C.
Boundary layer over spinning blunt-body of revolution at incidence including magnus forces
[AD-A049199] p0255 N78-19072
WANG, K. K.
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis
[AD-A048840] p0254 N78-19065
WANG, N.
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
WANG, S. T.
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
WANHILL, R. J. H.
The effect of sheet thickness on flight simulation fatigue crack propagation in 2024-T3, 7475-T761 and mill annealed Ti-6Al-4V
p0420 A78-41536
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminium alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
WANNER, J.-C.
Evolution of aircraft design through the CCV concept
p0416 A78-40868
WARCUP, R. W.
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
WARD, D. W.
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports

[NASA-TM-78769] p0635 N78-33874
WARD, E. D.
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
WARD, W.
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
WARNER, D. E.
Filtered sequential regression parameter identification applied to a gas turbine engine model
p0182 A78-23879
WARNER, H. H.
Development of a symbology exerciser for display generation and analysis on the visually-coupled airborne systems simulator (VCASS)
[AD-A055464] p0630 N78-33124
WARREN, D. V.
Airborne equipment for all weather operations
p0570 A78-50448
WARUSZEWSKI, H. L.
Air Force electronically generated symbology standardization
p0067 A78-15670
WARWICK, G.
Mirage 2000 - Dassault's better delta
p0523 A78-49169
WASCH, R. B. A.
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
WASHBURN, G. P.
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087
WASHBURN, K. E.
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
WASKOWSKI, W.
The Aerospatiale helicopter factory at Marignane
p0231 A78-28194
WASSENBERGH, H. A.
Innovation in international air transportation regulation - The US-Netherland's agreement of 10 March 1978
p0592 A78-52447
WASSERBAUER, J. F.
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[AIAA PAPER 78-961] p0474 A78-45096
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125
WASSON, G. E.
Flight tests of digital data transmission
p0285 A78-31050
WASYLKIWSKYJ, W.
On the use of zirconium 95 data from Chinese atmospheric thermonuclear explosions to study stratospheric transport in a one-dimensional parameterization
p0517 A78-48062
WATANABE, M.
Some considerations on pure tone noise generation in an axial-flow fan
p0577 A78-50619
WATERMAN, H. E.
FAA role of certification - Advanced aircraft systems
[AIAA 77-1472] p0005 A78-12230
FAA's certification position on advanced avionics
p0335 A78-34642
WATERS, K. T.
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
WATERS, M. H.
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
WATKINS, J. A.
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
WATKINS, W. D.
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
WATSON, C. B.
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95
[NASA-TM-78706] p0604 N78-32050
WATTS, J. C.
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
WATTS, J. D.
Interface design considerations for F-16 sensors and weapons
p0532 A78-49874
WATTS, R.
European air transport up to the year 2000 /Lord Douglas of Kirtleside Lecture/
p0587 A78-51520
WAY, D. J.
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
WAY, J. L.
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
WAYSON, G. R.
Captive carriage vibration of air-to-air missiles on fighter aircraft
p0587 A78-51470
WAZYNIAK, J. A.
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
WEAL, K. I.
Modification of an ambient air quality model for assessment of U.S. naval aviation emittants
p0231 A78-28273
WEAR, J. D.
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
WEATHERILL, W. H.
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
WEAVER, A. T.
Lightweight engine containment
p0026 N78-10080
WEAVER, J. H.
Thermal flux protection for aircraft
p0072 A78-16267
WEAVER, R. E.
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
WEBB, J. B.
Correlation of F-16 aerodynamics and performance predictions with early flight test results
p0436 N78-26092
WEBB, T. S.
Correlation of F-16 aerodynamics and performance

predictions with early flight test results
p0436 N78-26092
WEBER, F.
Wake vortex turbulence and its effect on the flight operations - Possibilities for its exploration and prediction
p0074 A78-16378
WEBER, J. A.
Splined version of FLEXSTAB: A critical analysis of alternate schemes
[NASA-CR-152030] p0020 N78-10027
WEBER, J. G.
DAIS - Design and performance
[AIAA 77-1499] p0006 A78-12247
WEBER, O.
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
WEBER, R. J.
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
WEBER, W. B.
Experimental determination of propulsion induced ground effects of typical three fan type A V/STOL configurations
[AIAA PAPER 78-1507] p0516 A78-47943
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
WEBSTER, A.
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
WECK, M.
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives
[BMVG-FBWT-77-16] p0245 N78-18072
WEDDERSPOON, J. H.
Development of low sweep, high aspect ratio wings designed for high Reynolds number
p0477 A78-45233
WEEKS, D. J.
An experimental investigation of the drag of thick supercritical aerofoils - A progress report
p0478 A78-45243
WEEKS, R. A.
Digital real time simulation of the F-5E/F flight director computer
[AIAA 77-1528] p0008 A78-12267
Digital simulation and flight verification of the F-5E/F Flight Director Computer
p0534 A78-49905
WEENER, E. F.
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0433 N78-26066
WEFATI, E. M.
A new approach to future airport planning
p0134 A78-20482
WEGLER, D.
Glass airports
p0570 A78-50434
WEGMANN, H. M.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
WEHRMANN, O.
Basic aerodynamic research on the air [illegible] integration of high bypass engines, [illegible] 1
[BMFT-FB-W-77-20] p03 [illegible] N78-22083
WEHRUM, A.
Effect of inflow nonuniformity on low-speed wind-tunnel nozzles
p0333 A78-34160
WEI, R. P.
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455
WEIDNER, J. P.
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
WEILAND, E.
Long term experience with a hingeless/composite rotor
p0262 N78-19137
WEILER, W.
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109
WEINER, D. C.
On setting avionic subsystem unit production cost goals
[AD-A051337] p0398 N78-24133
WEINBERG, A.
Satellite-aided ATC system concepts employing the Navstar Global Positioning System
[M77-59] p0111 A78-17903
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
WEINGARTEN, J. L.
Aeronautical procurement - The primary specification system
[AIAA PAPER 78-1489] p0514 A78-47932
Cargo aircraft and spacecraft forward restraint criteria
[AD-A055343] p0561 N78-31095
WEINGARTEN, N. C.
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
WEINREICH, M.
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
WEINSTEIN, A. I.
A modern warm fog dispersal system
p0056 A78-14994
WEINSTEIN, W.
Navy advanced sensor programs for fly-by-wire aircraft
[AIAA 77-1504] p0006 A78-12251
WEISE, K.
From analog to digital control systems - Improved performance by means of advanced technology
[DGLR PAPER 77-036] p0190 A78-24426
WEIST, G.
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109
WEISZ, C. P.
Airfield pavement evaluation - The airline view
p0526 A78-49680
WELBHOFF, F.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
WELCH, J. D.
The communications aspects of the DABS transponder
[AIAA 77-1525] p0008 A78-12265
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
WELL, K. H.
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
WELLER, W. H.
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053
Comparison of aerodynamic data measured in air and Freon-12 wind-tunnel test mediums
[NASA-TM-78671] p0312 N78-21052
WELLS, R. A.
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
WELLS, R. W.
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
WELLS, W. I.
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105

WELLS, W. R.
Multiple control input design for identification of light aircraft
p0114 A78-18466
Detection of sensor failure and output reconstruction for aircraft engine controls
[AIAA PAPER 78-4] p0157 A78-20627
Failure state detection of aircraft engine output sensors
p0184 A78-23906
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
WELSH, B. L.
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
WELSH, C. J.
The AEDC Range K facility for erosion testing
[AIAA 78-775] p0294 A78-32334
WELTE, D.
Profile design for an advanced-technology airfoil for general aviation aircraft
[DGLR PAPER 77-027] p0189 A78-24418
Design and wind tunnel testing of the supercritical wing with manoeuvre flaps for the Alpha Jet as experimental aircraft
p0477 A78-45231
Profile design for an advanced-technology airfoil for general aviation aircraft
[NASA-TM-75323] p0605 N78-32054
WENK, A. F.
F-4E avionics update
[AD-A047949] p0243 N78-18061
WENTHE, V.
The Dual-Flight-Simulator as an aid for a government mission specialist
[DGLR PAPER 77-079] p0290 A78-31949
WENTZ, K. R.
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
WERESZCZYNSKI, J.
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
The use of Doppler-shift position lines in satellite navigation systems
p0590 A78-51890
WERLE, H.
Flow in a hydraulic model of an axial turbomachine
[ONERA, TP NO. 1977-157] p0075 A78-16619
WERNER, CH.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
WERNER, J.
Slender body theory programmed for bodies with arbitrary cross section
[NASA-CR-145383] p0437 N78-26102
WERNICKE, K. G.
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
WESOKY, H. L.
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132
WESSALE, W. D.
Real-time digitally driven graphic-display systems in aircraft simulations
p0069 A78-15707
WESSON, R. B.
Problem-solving with simulation in the world of an air traffic controller
p0451 N78-27098
WEST, T. C.
Simulator studies of powered-lift aircraft handling qualities in the presence of naturally-occurring and computer-generated atmospheric disturbances
[AIAA 78-1362] p0484 A78-46551
WESTERMEIER, T. F.
In-line monitoring of digital flight control computers
p0531 A78-49860
Triplex digital fly-by-wire redundancy management techniques
[AIAA 78-1279] p0541 A78-50187
WESTFALL, L. J.
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
WESTFIELD, W. T.
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
WESTON, R. P.
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392
Effects of wing leading-edge deflection on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration
[NASA-TM-78787] p0622 N78-33047
WESTPHAL, W. I.
Compressor blade manufacture by electrochemical machining. Advanced turbine engine gas generator
[AD-A043742] p0030 N78-10110
WETZEL, D.
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Fatigue strength of the upper guide rail of the A-300 no. 4 landing flap support (tests, results, and evaluation)
[DLR-IB-152-77/09] p0038 N78-11057
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B
[DLR-IB-152-77/11] p0038 N78-11058
WETZEL, J. K.
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
WEYER, H.
Nonintrusive measurements of the flow vectors within the blade passages of a transonic compressor rotor
p0012 A78-12315
WHALEN, J. J.
Assessment procedure application utilizing UHF transistor RF pulse susceptibility data
p0384 A78-39101
WHALEY, P. W.
Prediction of angular disturbances from airframe members to airborne electro-optical packages
p0536 A78-49952
WHEATLEY, T. E.
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
WHEELER, E. R.
Helicopter TF radar Pavelow III
p0068 A78-15697
WHEELER, G. L.
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
WHEELER, P. J.
Concorde AIDS - Powerplant applications
[SAE PAPER 770995] p0181 A78-23831
WHIRLOW, D. K.
Application of time-dependent finite volume method to transonic flow in large turbines
p0011 A78-12297
WHISNANT, R. A.
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
WHITAKER, A. B.
V/STOL hover stability impact on hover control task
p0258 N78-19102
WHITBECK, R. F.
Digital control law synthesis in the w prime domain
p0507 A78-46962
WHITCOMB, W. H.
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28

[NASA-TM-73250] p0079 N78-12011
WHITCOMB, W. P.
Impact of federal noise abatement policy on aircraft financing
p0583 A78-51131
WHITE, E. A.
Project optimisation of military gas turbines with respect to turbine life
p0319 N78-21120
WHITE, J. H.
Design and operation of an airborne air quality measurement system
p0107 A78-17575
WHITE, J. L.
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads
[NASA-CR-135395] p0454 N78-27124
WHITE, M. L.
Design and fabrication of an improved performance, low cost, composite main rotor blade for the Cobra helicopter
p0077 A78-16906
WHITE, S. D.
Turbine tip-clearance measurement
[AD-A052042] p0362 N78-23097
WHITE, S. S.
Interaction of thick film dielectric, conductor, and alumina substrate for DCU201 aircraft controller
[SAND-78-0069] p0493 N78-28349
WHITE, W. F.
Airborne antenna coverage requirements for the TCV B-737 aircraft
[NASA-TM-78647] p0153 N78-15325
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074
WHITE, W. F., JR.
Comment on 'Dynamic characteristics of rotor blades - Integrating matrix method'
p0336 A78-34659
The influence of high twist on the dynamics of rotating blades
p0510 A78-47599
WHITE, W. L.
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A; tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
WHITEHEAD, A. H., JR.
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061
WHITEHEAD, D. S.
Linearized supersonic unsteady flow in cascades
[ARC-R/M-3811] p0545 N78-30065
WHITEHEAD, R. E.
Analysis of advanced variable camber concepts for combat aircraft
p0592 A78-52592
Analysis of advanced variable camber concepts
p0549 N78-30108
WHITELAW, J. H.
Impingement cooling and its application to combustor design
p0573 A78-50584
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
WHITENER, P. C.
Distributed load aircraft concepts
[AIAA PAPER 78-100] p0172 A78-22573
WHITMOYER, R. A.
The fighter control configured vehicle /CCV/ program development and flight test summary
p0125 A78-19444
WHITNEY, M. C.
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
WHITTEN, P. D.
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
WHITTEN, R. C.
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
WHITTLE, D. A.
Design considerations for a ground avoidance monitor for fighter aircraft
p0432 N78-26058
WICK, B. H.
Calculation of the lift of partially-stalled wings
[NAL-TR-498T] p0252 N78-19054
WICKS, B. J.
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
WIDNALL, S. E.
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
WIDNALL, W. S.
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
WIECKOWSKI, J.
Some experiments with satellite-navigation Doppler receivers Magnavox 'MX-902' and 'ITT-6001'
p0343 A78-36114
WIELEBSKI, K.
Accuracy of ship-position determination by means of NNSS Transit
p0590 A78-51889
WIERSMA, S. J.
Fire detector response in aircraft applications
p0599 A78-53674
WIESEMANN, W.
Flight-testing of a continuous laser remote sensing system
p0387 A78-39632
WIGG, L. D.
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131
WIGHT, K. C.
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
WIGNOT, J. E.
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
WIJNANDS, A. P. J.
A photographic study of the interaction of two high-velocity gas jets
p0016 A78-13049
WIJNBERGEN, J.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
WILBY, J. F.
Interior acoustic environment of STOL vehicles and helicopters
p0340 A78-35656
WILCOX, D. E.
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
WILCOX, R. E.
Combinatorially derived limits on the surface

return for an air/surface monopulse ranging radar
p0539 A78-50001
WILCOX, R. S.
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
WILDE, G. L.
The design and performance of high temperature turbines in turbofan engines
p0112 A78-18023
Future large civil turbofans and powerplants /Seventeenth Short Bros. Commemorative lecture/
p0587 A78-51519
WILDERMUTH, E.
Proposal for a cost effective radar navigation system for low altitude and terminal area flight
p0431 N78-26057
WILEB, C. D.
The HiMAT PRRV system
[AIAA PAPER 78-1457] p0511 A78-47908
RPV flying qualities design criteria
[AIAA 78-1271] p0540 A78-50181
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
WILES, D.
Multiprocessing for electronic warfare avionics
p0532 A78-49869
WILHEM, D. P.
Application of resistance curves to residual strength prediction
p0339 A78-35380
Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
WILKERSON, J. B.
An assessment of circulation control airfoil development
[AD-A043826] p0033 N78-11012
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
WILKINS, D. J.
Environmental sensitivity tests of graphite-epoxy bolt bearing properties
p0004 A78-12080
WILLARD, C. M.
Installed performance of vectoring/reversing non-axisymmetric nozzles
[AIAA PAPER 78-1022] p0520 A78-48482
WILLEKE, H.
Test report on the application of the Linde fog removal equipment at the Erding air base
[DLR-IB-75/8] p0145 N78-14763
WILLETT, F. M., JR.
Area navigation - Fast-time/real-time simulations in a high-altitude center environment
p0596 A78-52977
High-altitude area navigation (RNAV) enroute simulation
[AD-A049315] p0257 N78-19088
WILLEY, C. S.
A new analysis method for determination of FAA stall speed
p0124 A78-19440
WILLIAMS, C. R.
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311
WILLIAMS, J. C.
The effect of microstructure on fracture of a new high toughness titanium alloy
p0332 A78-33633
WILLIAMS, J. C., III
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
WILLIAMS, J. E.
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
WILLIAMS, J. F.
Digital avionics system for the Shuttle Training Aircraft
[AIAA 77-1529] p0008 A78-12268
WILLIAMS, J. R.
Adaptive tracking filter for maneuvering targets
p0222 A78-26167
V/STOL flying qualities requirements in the UK
p0258 N78-19103
WILLIAMS, L. E.
Application of an airborne digital computer in the F-15 engine air inlet control system
[AIAA 77-1480] p0009 A78-12276
WILLIAMS, M. L.
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] p0402 N78-24515
WILLIAMS, P. G.
Dual device redundancy management
[AIAA 77-1441] p0015 A78-12695
WILLIAMS, R. C.
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
WILLIAMS, R. H.
Service experience and materials evolution in Air Force jet engines
p0219 A78-25208
WILLIAMS, R. L.
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084
WILLIAMS, R. M.
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
WILLIAMS, R. W.
Experimental determination of propulsion induced ground effects of typical three fan type A V/STOL configurations
[AIAA PAPER 78-1507] p0516 A78-47943
WILLIAMS, V.
Eddy current torques, air torques, and the spin decay of cylindrical rocket bodies in orbit
p0592 A78-52578
WILLIAMS, W. R.
Comparison tests on the 100-GPM electrokinetic fuel decontaminator and a 100-GPM military standard filter/separator
[AD-A049655] p0248 N78-18226
WILLIS, C. M.
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
WILLIS, E. A.
General aviation energy-conservation research programs at NASA-Lewis Research Center
p0276 A78-29330
General aviation internal combustion engine research programs at NASA-Lewis Research Center
[AIAA PAPER 78-932] p0462 A78-43505
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
WILLMARTH, W. W.
APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
WILLOUGHBY, M. G.
Operational Software Concept OSC executive evaluation/refinement
[AD-A055902] p0618 N78-32754
WILLSKY, A. S.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
WILMOTH, R. G.
Prediction of nearfield jet entrainment by an

interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
WILSON, C. A.
YF 102 in-duct combustor noise measurement, volume 1
[NASA-CR-135404-VOL-1] p0412 N78-25827
YF 102 in-duct combustor noise measurement, volume 3
[NASA-CR-135404-VOL-3] p0412 N78-25829
WILSON, D. A.
The aerodynamic performance of a freely hinged door between two flows
p0586 A78-51464
WILSON, D. H.
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
WILSON, J. R.
Propulsion system airframe integration studies - Advanced supersonic transport
[AIAA PAPER 78-1053] p0521 A78-48488
The common case study: Lockheed design of a supersonic cruise vehicle
[NASA-CR-158935] p0625 N78-33086
WILSON, R. E.
Performance-optimized horizontal-axis wind turbines
p0170 A78-22232
The effect of hub fairings on wind turbine rotor performance
p0281 A78-30039
WILSON, R. G.
Today's non-metallic composite airframe structure - An airline assessment
p0218 A78-25196
WILSON, S. S.
Distributed processor control of a multiple beam adaptive array for telemetry, command and control of airborne vehicles /RPV's/
[AIAA 77-1481] p0009 A78-12283
WINCZURA, Z.
The effect of a parachute on the motion of an axisymmetric object dropped from an aircraft
p0288 A78-31811
WINGET, L.
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130
WINGETT, C. M.
Assess II - A simulated mission of Spacelab
p0569 A78-50276
WINGROVE, R. C.
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
WINN, L. W.
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
WINNER, R. N.
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062
WINNETT, A. G.
Application of the thrust augmentation wing principle for potential military use
p0110 A78-17893
WINSA, E. A.
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
WINTER, A. E.
Satellites for position determination
p0601 A78-53911
WINTER, H.
Navigation procedure - Present systems and development trends
[DGLR PAPER 77-018] p0189 A78-24411
WINTER, J.
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
WINTER, W. R.
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
WINTHER, B. A.
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128
WIRASINGHE, N. E. A.
Changes in conical diffuser performance by swirl addition
p0586 A78-51463
WISE, C.
Multiprocessing for electronic warfare avionics
p0532 A78-49869
WISE, C. D.
Fiber optic data buses for avionics - A systems view
p0066 A78-15656
WISE, K. D.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
WISLER, D. C.
Core compressor exit stage study. Volume 1: Blading design
[NASA-CR-135391] p0501 N78-29099
WISLICKI, B.
Temperature characteristics of the speed of sound and compressibility of standard fuels and petroleum oils
p0225 A78-26756
WISNER, C.
Initial development of a tactical system for dispersing supercooled stratus
[AD-A056570] p0635 N78-33677
WITCOPSKI, R. D.
Hydrogen fueled subsonic aircraft - A prospective
p0118 A78-18843
Progress on coal-derived fuels for aviation systems
[NASA-TM-78696] p0412 N78-25545
Progress on coal-derived fuels for aviation systems
p0497 N78-29063
WITHINGTON, H. W.
Design concepts for future air freighters
p0592 A78-52450
WITMER, E. A.
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
WITSMEER, A. J.
Pattern recognition as an aid to radar navigation
p0530 A78-49855
WITT, J. H.
FAA facilities maintenance cost reduction model
p0428 A78-43043
WITT, R. H.
Advanced joining techniques in aerospace cell structures
p0045 N78-11392
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
WITTENBERG, H.
Prediction of off-design performance of turbojet and turbofan engines
p0434 N78-26077
WITTLIN, G.
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
WITTMAN, R. B.
V/STOL hover stability impact on hover control task
p0258 N78-19102
WITTMANN, M.
Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
WLEZIEN, R. W.
Techniques for the experimental investigation of the near wake of a circular cylinder
[AIAA PAPER 78-1197] p0423 A78-41888
WOAN, C. J.
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832

Design of propellers for minimum noise
p0351 N78-22094
WOERNDLE, R.
Use of structural analysis programs for calculating states of stress in helicopter rotor elements
p0382 A78-38807
WOHLLEBE, F. A.
Fountain and upwash flowfields of multijet arrangements
p0473 A78-44833
WOJCIECH, J. J.
Discrete Address Beacon System (DABS) Development Test and Evaluation (DT and E) program
[AD-A052363] p0439 N78-26123
WOLF, J.
Why the flexible wing. II
p0176 A78-23058
Space optical communications with the Nd:YAG laser
p0285 A78-30886
WOLF, S. W. D.
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141
WOLF, T. L.
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
WOLFE, H. F.
Development of random fatigue data for adhesively bonded and weldbonded structures subjected to dynamic excitation
[ASME PAPER 77-WA/MAT-1] p0177 A78-23373
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
WOLFE, L. D.
Advance nozzle technology
p0550 N78-30111
WOLFE, R. A.
Army UTTAS program
[SAE PAPER 770952] p0179 A78-23803
The US Army UTTAS and AAH programs
p0262 N78-19131
WOLFF, J. L.
Helicopter TF radar Pavelow III
p0068 A78-15697
WOLFSON, G.
Development of a programmable panel
[AD-A048469] p0258 N78-19098
WOLKOVITCH, J.
Nacelle effects on stability of VSTOL configurations including conventional, canard, and tandem wing arrangements
[AIAA PAPER 78-1504] p0516 A78-47942
WOLOVICH, W. A.
A frequency domain approach to handling qualities design
p0357 N78-23019
WONG, J. L.
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368
WOOD, C. J.
The 4m x 2m industrial aerodynamics wind tunnel
[ODEL-1188/77] p0100 N78-13085
WOOD, E. W.
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894
WOOD, J. R.
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
WOOD, L. J.
Minimum-time loop maneuvers of jet aircraft
p0473 A78-44830
Guaranteed cost control of linear systems with uncertain parameters - Application to remotely piloted vehicle flight control systems
[AIAA 78-1274] p0541 A78-50184
WOOD, N. E.
Advances in primary flight control actuation using electromechanical technology
p0067 A78-15691
WOOD, W. D.
Wake turbulence detection and economic impact of proposed improvements
[SAE PAPER 770583] p0059 A78-15385
WOODCOCK, D. L.
Diverse forms and derivations of the equations of motion of deformable aircraft and their mutual relationship
[RAE-TR-77077] p0548 N78-30097
WOODCOCK, W. A.
Pavement strength rating methods as viewed by airframe manufacturers
p0526 A78-49682
WOODIE, P.
A study of the economic impact of selected communications alternatives, present system definition
[AD-A052162] p0365 N78-23285
WOODWARD, A. C.
Helicopter TF radar Pavelow III
p0068 A78-15697
WOODWARD, J. E.
Remote maintenance monitor systems
p0111 A78-17911
WOODWARD, O. M.
Bearing study program
[AD-A049767] p0314 N78-21068
WOODWARD, R. P.
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
Acoustic evaluation of a novel swept-rotor fan
[NASA-TM-78878] p0403 N78-24897
WOOLARD, H. W.
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
WOOLER, P. T.
Aerodynamic characteristics of a jet sheet vortex generator
[NASA-CR-158904] p0487 N78-28054
WOOLFSON, M. G.
Digital area correlation tracker
p0536 A78-49951
WOOLLEY, J. P.
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
WOOLLEY, M.
The evolution of a remotely piloted vehicle microprocessor flight control system
[AIAA 78-1273] p0541 A78-50183
WOOMER, C. W.
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084
WOOTEN, E.
RNAV - Corporate operators set the pace
p0509 A78-47424
WORATSCHEK, R.
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
WOROBEI, P.
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
WORTMANN, F. X.
Drag reduction for gliders
[NASA-TM-75293] p0396 N78-24116
WORTMANN, J.
Application of skin technology to turbine blades
[AIAA PAPER 78-285] p0163 A78-20792
WRIGHT, B. R.
Arrow wings for supersonic cruise aircraft
[AIAA PAPER 78-151] p0173 A78-22588
WRIGHT, S. E.
Theory on acoustic sources
p0619 N78-32824
WRIGLEY, B.
Technical evaluation report on the 51st(B) PEP Specialists' Meeting of the Propulsion and Energetics Panel on Seal Technology in Gas Turbine engines
[AGARD-AR-123] p0612 N78-32104

WU, J. C.
Viscous flow around an oscillating airfoil - A numerical study
[AIAA PAPER 78-1225] p0424 A78-41904
A numerical study of viscous flows around airfoils
[AD-A046084] p0137 N78-14001
Prospects for computational aerodynamics
p0270 N78-19795
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
WU, J. J.
Vibrations of a helicopter rotor blade using finite element unconstrained variational formulations
[AD-A052670] p0397 N78-24125
WU, J. M.
The analysis of wing-body combinations at moderate angles of attack
[AIAA PAPER 78-62] p0158 A78-20663
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
WU, S. M.
Runway roughness characterization by DDS approach
p0284 A78-30679
WUENNENBERG, H.
Open loop gust alleviation
[BMFT-FB-W-77-22] p0353 N78-22114
WUEST, P.
Open loop gust alleviation
[BMFT-FB-W-77-22] p0353 N78-22114
Open-loop compensation of wind-shear effects in low level flight
p0431 N78-26052
WUNNENBERG, H.
Advanced control concepts for future fighter aircraft
p0549 N78-30104
WURTZ, J. E.
CPT update
p0374 A78-37490
WYATT, F. G.
Influence of mechanical transmission concepts on Navy Type 'A' operational aircraft weight
p0110 A78-17896
WYCKOFF, D. D.
The domestic airline industry
p0003 A78-11951
WYNDLE, G. A.
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126

Y

YAGER, T. J.
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043
YAMADA, H.
A new air blast type combustor - Design, performance and emission
p0574 A78-50593
YAMADA, N.
Numerical study on the stability dependence of geostrophic drag and cross-isobar angle
p0580 A78-50691
YAMAGISHI, M.
New model VOR/DME
p0373 A78-37246
YAMAGUCHI, N.
Broadband noise in axial-fan blade cascade
p0579 A78-50650
YAMAMOTO, A.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
YAMAMOTO, K.
Azimuthal decomposition of the power spectral density of jet noise
p0375 A78-37532
Flow of highly rarefied gas past a circular cylinder at low Mach numbers
p0424 A78-42200
On an acoustic field generated by subsonic jet at low Reynolds numbers
[NASA-CR-156182] p0356 N78-22858
YAMAZAKI, S.
Development of the experimental gas turbine bus
p0575 A78-50601
YANG, J. C. S.
Transverse compressional damping in the vibratory response of elastic-viscoelastic-elastic beams
p0571 A78-50451
YANG, J. N.
Reliability prediction for composites under periodic proof tests in service
p0003 A78-12068
YANSON, R. A.
Study on stage of centrifugal compressor with air turbine
[AD-A045436] p0101 N78-13452
YAO, S.
Filament-winding fabrication of QCSEE configuration fan blades
[NASA-CR-135332] p0198 N78-16052
Composite hub/metal blade compressor rotor
[NASA-CR-135343] p0247 N78-18131
YARKER, J.
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
YAROSLAVTSEVA, M. N.
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
YATES, E. C., JR.
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046
YATES, J. E.
Viscous thin airfoil theory and the Kutta condition
[AIAA PAPER 78-152] p0159 A78-20707
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
YATES, R. J.
Factors influencing schedule reliability in international operations
p0275 A78-29213
YBARRA, A. H.
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
YEAGER, W. T., JR.
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044
YEGHIAYAN, R. P.
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28484
YEH, C. F.
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
YEH, W. Y.
Effects of dynamic aeroelasticity on handling qualities and pilot rating
p0560 N78-31084
YEH, W.-Y.
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554

YENERIZ, M. A.
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
YENNI, K. R.
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
YESUNAS, E. J.
Deadload calibration program of CVN 68 catapult configuration
[AD-A042225] p0043 N78-11123
YIP, L. P.
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration
[NASA-TP-1090] p0092 N78-13014
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
YOKEL, S. A.
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104
YOKELY, R.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
YONEZAWA, K.
Evaluation of geometric performance of global positioning system
p0378 A78-37987
YOSHIDA, Y.
Aerodynamic and cooling performances of a film cooled turbine
p0575 A78-50599
YOSHIHARA, H.
Finite difference procedure for unsteady transonic flows - A review
p0011 A78-12294
Transonic computational design modifications of the F-111 TACT
[AIAA PAPER 78-106] p0172 A78-22577
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist
p0269 N78-19789
YOSHINAKA, T.
Surge responsibility and range characteristics of centrifugal compressors
p0577 A78-50616
YOSHIOKA, E.
Estimating the average taxi speed of departing aircraft
p0571 A78-50450
YOUNG, A. D.
Some special boundary layer problems /20th Ludwig Prandtl Memorial Lecture/
p0176 A78-23295
YOUNG, C.
A theoretical study of the effect of blade ice accretion on the power-off landing capability of a Wessex helicopter
p0372 A78-36948
YOUNG, H. R.
The Advancing Blade Concept (ABC) rotor program
p0263 N78-19143
YOUNG, H. T.
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations
[AD-A042785] p0206 N78-17044
YOUNG, J. A.
Turbine engine slip ring technology - A survey
[SAE PAPER 770976] p0179 A78-23820
YOUNG, J. C.
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096
YOUNG, L. R.
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
YOUNG, P. H.
Some practical limitations to fuel-conservative civil engine technology
[AAAP-NT-77-29] p0351 N78-22092
YOUNG, R. H.
Independent power generator
[NASA-CASE-LAR-11208-1] p0617 N78-32539
YOUNG, W. P.
C-5 wing modification - Weight and design to cost status
p0110 A78-17897
YOUNG, W. H., JR.
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques
[NASA-TP-1168] p0325 N78-21410
YOUNG, W. R.
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115
YOUNGS, J. M.
Techniques for evaluating airframe structural elements and their applications to design-to-cost
p0109 A78-17886
YU, C. L.
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
YU, H. J.
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
YU, Y. H.
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
YUAN, H. S.
An investigation of short haul air transportation in the southeastern United States
[NASA-CR-152166] p0451 N78-27094
YUHAS, L. J.
Conversion of an automotive engine for aircraft application
[AIAA PAPER 78-309] p0185 A78-24010
YULO, C.
An overview of enroute radio navigation services for civil aviation
[AIAA 77-1509] p0007 A78-12255

Z

ZABINSKY, J. M.
The influence of propulsion and control system concepts on design of a Navy Type A V/STOL airplane
[AIAA PAPER 78-1505] p0529 A78-49788
ZABKOWICZ, W.
MSP/ITWL airborne measuring system
p0231 A78-28196
ZACHARIAS, A.
An investigation on thrust vector control
[DLR-IB-151-76/15] p0043 N78-11118
ZAHORA, E. P.
Water borne coatings
p0069 A78-15852
ZAIDENVARG, M. A.
Machine algorithm for determining the cross sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
ZAIKIN, V. M.
Theoretical and experimental investigation of the wake structure behind a sphere in supersonic gas flow at small Reynolds numbers
p0586 A78-51437
ZAIONCHKOVSKII, G. I.
The effect of hydraulic feed systems on the dynamic characteristics of hydraulic amplifiers of helicopter control systems
p0474 A78-44893
ZAKKAY, V.
The use of fluidized beds for heating air for wind tunnels
[AIAA 78-818] p0297 A78-32372
ZAMALIN, S. M.
Machine algorithm for determining the cross

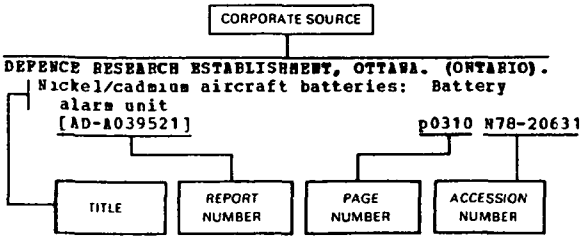
sectional parameters of end-fairings of wing and tail assembly
p0131 A78-20268
ZAMULA, G. N.
Economical method for calculating unsteady temperature fields in thin-walled aircraft structures
p0165 A78-20903
ZANTON, D. F.
Design and analysis of winglets for military aircraft, phase 2
[AD-A046152] p0140 N78-14035
ZARA, E.
Advanced environmental control for avionic systems
p0060 A78-15559
ZARETSKY, E. V.
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
ZARIPOV, N. G.
The problem of choosing design parameters for unpiloted flight-vehicles
p0292 A78-32258
Optimization of the design parameters of finned pilotless flight vehicles
p0293 A78-32269
ZARTARIAN, G.
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122
ZATOLOKA, V. V.
Pulse tubes for aerodynamic studies
p0415 A78-40298
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926
ZAULICHNYI, E. G.
Boundary-layer interaction with a nonequilibrium two-phase stream on a surface being burned out in an axisymmetric Laval nozzle
p0273 A78-28610
ZEDAN, M. F.
Potential flow around axisymmetric bodies - Direct and inverse problems
p0223 A78-26230
Viscous drag computation for axisymmetric bodies at high Reynolds numbers
[AIAA PAPER 78-1183] p0422 A78-41876
ZEHNER, E.
Design and optimization of the Tornado control system by means of simulation
p0417 A78-41024
ZEITLIN, O.
Status of aircraft noise control in Israel
p0015 A78-12823
ZELEV, V. P.
Analysis and calculation of plane skew symmetric contours of second-order smoothness
p0174 A78-22636
ZELLER, J. B.
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024
ZELON, C. C.
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
ZENCZAK, S.
Beryllium in aircraft brakes - A summary
p0473 A78-44736
ZHAROV, E. A.
Automatic sustainment of resonance conditions in the multipoint excitation of flight-vehicle vibrations
p0293 A78-32268
ZHAVORONKOV, V. P.
Aircraft radar systems
p0377 A78-37873
ZHELDOCHENKO, V. N.
Checking the effectiveness of negative allowance in blush bolted joints in aircraft structures
p0131 A78-20261
ZHESTKOV, B. E.
Simulation of the flight conditions in the ionosphere
p0165 A78-20915
ZHEVNIN, A. A.
Plotting of vertical maneuvers of aircraft in the atmosphere
p0069 A78-15870
ZHILIN, IU. L.
Some characteristics of sonic boom propagation in an inhomogeneous atmosphere
p0128 A78-19691
ZHILIN, IU. V.
Experimental investigation of gasdynamic processes at sudden start-up of a supersonic nozzle
p0379 A78-38641
ZHILIN, Y. L.
A minimum inductive resistance wing near the surface of the earth
[AD-A044690] p0082 N78-12042
ZHUIKOV, V. V.
A computer-aided method of calculating temperature fields in turbine disks
p0581 A78-50796
ZHURAVSKII, V. A.
Effect of wall thickness /height of the injection pipe/ on the mixing process in a system of chordal jets in a flow
p0582 A78-50797
ZIDARU, G.
Geometric properties of NACA profiles
p0328 A78-33005
ZIEGLER, H.
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Aerodynamic characteristics of a jet sheet vortex generator
[NASA-CR-158904] p0487 N78-28054
ZIEMIANSKI, J. A.
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
ZIEREP, J.
Turbulent boundary layer separation on a curved wall with normal compression shock
p0583 A78-51155
ZIMMER, H.
The significance of wing end configuration in airfoil design for civil aviation aircraft
[DGLR PAPER 77-030] p0189 A78-24421
ZIMMER, H.
Aircraft Satellite Data Link
p0338 A78-34971
ZIMMERMANN, H.
Impact of active control on structures design
p0550 N78-30113
ZIMMERMANN, K.
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
ZINN, B. T.
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
ZIPKIN, M. A.
Evolution of the aircraft gas turbine engine
p0282 A78-30257
ZLOCKA, M.
Lateral stability of a light aircraft during landing
p0167 A78-21020
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072
ZOCCOLI, M. J.
Advanced scavenge systems for an integrated engine inlet particle separator
[AD-A047872] p0210 N78-17069
ZOLA, C. L.
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041

ZOLOTUKHIN, V. K.
Load-bearing capacity of a single-contour thin rod during the combined action of transverse force and bending moment
p0132 A78-20286
ZOOG, J. E.
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
ZOREA, C.
The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013
ZORUBSKI, W. E.
Aircraft flyover noise prediction
p0340 A78-35657
Prediction of aircraft sideline noise attenuation
[NASA-TM-78717] p0460 N78-27871
ZUBKOFF, M. J.
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
ZUCHOWICZ, K.
Static electricity in aviation and methods for preventing its effects. II
p0229 A78-27568
ZUCKERMAN, H. S.
Core engine noise reduction - Definition and trends
[AIAA PAPER 77-1273] p0130 A78-19978
ZUDOV, V. N.
Experimental study of overexpansion flows in a flat nozzle
p0427 A78-42984
ZVEGINTSEV, V. I.
Weight testing of heavy models in a pulsed wind tunnel
p0427 A78-42983
Influence of the compression process in air intakes on the specific impulse characteristics of a hypersonic ramjet engine
p0593 A78-52926

CORPORATE SOURCE INDEX

1978 Cumulative Index

Typical Corporate Source Index Listing



The title of the document is used to provide a brief description of the subject matter The page number and NASA accession number are included in each entry to assist the user in locating the abstract

A

ABEX CORP., OXNARD, CALIF.
Reliability, Improvement Warranty (RIW) mid contract evaluation
[AD-A048244] p0250 N78-18441

ACADEMY OF SCIENCES (USSR), MOSCOW.
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803

ADMINISTRATIVE SCIENCES CORP., ALEXANDRIA, VA.
Naval aircraft operating and support cost model - Fiscal Year 1976 revision
[AD-A053180] p0405 N78-25051

ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT, PARIS (FRANCE).
Selected papers on advanced design of air vehicles
[AGARD-AG-226] p0017 N78-10005
Possibilities and goals for the future SST
[AIAA-PAPER-75-254] p0017 N78-10006
Review of problems in application of supersonic combustion
p0017 N78-10007
Analysis of fluid dynamics of supersonic combustion process controlled by mixing
p0018 N78-10009
Effects of lengthwise lift distribution on sonic boom of SST configurations
p0018 N78-10010
Practical aspects of sonic boom problems
[ICAS-PAPER-70-23] p0018 N78-10011
Sonic boom analysis for high-altitude flight at high Mach number
[AIAA-PAPER-73-1034] p0018 N78-10012
Better marks on pollution for the SST
p0018 N78-10013
The jet engine design that can drastically reduce oxides of nitrogen
[AIAA-PAPER-74-160] p0018 N78-10014
The problem of pollution for the SST
[ICAS-PAPER-74-29] p0018 N78-10015
Secondary flows in turbomachines
[AGARD-CP-214] p0041 N78-11083
Advanced manufacturing techniques in joining of aerospace materials
[AGARD-LS-91] p0045 N78-11391
The principles of underwater escape from aircraft
[AGARD-AG-230] p0094 N78-13032
Technical evaluation report on the 49th(P) Propulsion and Energetics Specialists Meeting on Power Plant Reliability
[AGARD-AR-110] p0141 N78-14048
Technical evaluation report on the 49th(A) Propulsion and Energetics Panel Specialists' Meeting on Secondary Flows in turbomachines
[AGARD-AR-109] p0142 N78-14052
Engines for small propeller-driven RPVs, report of Sub-Group A of AGARD Working Group on Propulsion and Power Supplies for unmanned vehicles, volume 1
[AGARD-AR-101-VOL-1] p0151 N78-15054
Factors of safety: Historical development, state of the art and future outlook
[AGARD-R-661] p0153 N78-15311
Applications of structural optimization for strength and aeroelastic design requirements
[AGARD-R-664] p0207 N78-17048
Technical evaluation report on the Flight Mechanics Panel Symposium on rotorcraft Design
[AGARD-AR-114] p0207 N78-17049
An introduction to the problem of dynamic structural damping
[AGARD-R-663] p0211 N78-17074
Technical evaluation report on the Avionics Panel/Guidance and Control Panel Joint Symposium on Avionics/Guidance and Control for Remotely Piloted Vehicles (RPVs)
[AGARD-AR-113] p0211 N78-17075
Effects of structural non-linearities on aircraft vibration and flutter
[AGARD-R-665] p0211 N78-17076
Fatigue design of fighters: Guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft
[AGARD-AG-231] p0241 N78-18046
Rotorcraft Design
[AGARD-CP-233] p0261 N78-19126
Applications of Advances in Navigation to Guidance and Control
[AGARD-CP-220] p0314 N78-21071
High temperature problems in gas turbine engines
[AGARD-CP-229] p0319 N78-21118
Cobalt-base alloys for hot corrosion protective coatings
p0321 N78-21142
Unsteady aerodynamics
[AGARD-CP-227] p0345 N78-22033
Technical evaluation report on the multi-panel symposium on fighter aircraft design
[AGARD-AR-119] p0351 N78-22093
Aerodynamics of cascades
[AGARD-AG-220] p0353 N78-22111
Guidance and control design considerations for Low-Altitude and Terminal-Area Flight
[AGARD-CP-240] p0431 N78-26049
Performance Prediction Methods
[AGARD-CP-242] p0434 N78-26074
Technical evaluation report of the Specialists' Meeting on Unsteady Airloads in Separated and Transonic Flow
[AGARD-AR-108] p0438 N78-26115
Comments on the state of the art of transonic unsteady aerodynamics
p0439 N78-26118
Non-destructive inspection relationships to aircraft design and materials
[AGARD-CP-234] p0443 N78-26460
Technical evaluation report on the 24th Guidance and Control Panel technical meeting: Symposium on Applications of Advances in Navigation to Guidance and Control
[AGARD-AR-115] p0452 N78-27109
Technical evaluation report on the 50th Meeting of the Propulsion and Energetics Panel: A Symposium on High Temperature Problems in Gas Turbine Engines
[AGARD-AR-116] p0455 N78-27135

Combat damage tolerance and repair of aircraft structures
[AGARD-R-667] p0491 N78-28088
Fighter aircraft design
[AGARD-CP-241] p0549 N78-30099
Considerations on wing stores flutter: Asymmetry, flutter suppression
[AGARD-R-668] p0565 N78-31126
Technical evaluation report on the Fluid Dynamics Panel Symposium on Prediction of Aerodynamic Loading
[AGARD-AR-125] p0608 N78-32074
Technical evaluation report on the 51st(B) PEP Specialists' Meeting of the Propulsion and Energetics Panel on Seal Technology in Gas Turbine engines
[AGARD-AR-123] p0612 N78-32104
Technical evaluation report on the 51st (A) Specialists' Meeting of the Propulsion and Energetics Panel on Icing Testing for Aircraft Engines
[AGARD-AR-124] p0612 N78-32105

AERITALIA S.P.A., TORINO (ITALY).
NDI techniques in aerospace
p0443 N78-26461

AEROJET LIQUID ROCKET CO., SACRAMENTO, CALIF.
Dual throat thruster cold flow analysis
[NASA-CR-150822] p0631 N78-33142

AERONAUTICAL RESEARCH ASSOCIATES OF PRINCETON, INC., N. J.
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
Viscous effects in aircraft trailing vortices
p0080 N78-12019
Application of the Bernoulli enthalpy concept to the study of vortex noise and jet impingement noise
[NASA-CR-2987] p0356 N78-22861
Application of second-order turbulent modeling to the prediction of radiated aerodynamic sound
[NASA-CR-2994] p0411 N78-25359

AERONAUTICAL RESEARCH FOUNDATION, CAMBRIDGE, MASS.
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070

AERONAUTICAL RESEARCH INST. OF SWEDEN, STOCKHOLM.
Transonic wind tunnel tests on two-dimensional aerofoil sections. Determination of pressure distribution and drag for an aerofoil with a modified NACA 65 sub2-215 section in FFA wind tunnel S5, part 2
[FFA-TN-AU-725] p0313 N78-21062
Measurement of the pitch damping on two AGARD B models in the FFA S4 and S5 wind tunnels
[FFA-AU-556] p0438 N78-26112
Calculation of laminar boundary layers on infinite swept wings based on Thwaites two-dimensional method
[FFA-AU-1431] p0488 N78-28061

AERONAUTICAL RESEARCH LABS., MELBOURNE (AUSTRALIA).
Stability of helicopter slung loads
[ARL/AERO-NOTE-364] p0196 N78-16040
A brief examination of the flow external to an F-111 intake at Mach 1.6
[ARL/ME-NOTE-357] p0313 N78-21054
Vibration investigation of helicopter engine cooling fan
[AD-A047081] p0399 N78-24146
Transonic wind tunnel tests on a NACA 0012 aerofoil
[ARL/AERO-REPT-148] p0437 N78-26095
Aircraft structural fatigue
[ARL/STRUC-REPT-363] p0553 N78-30271
Safety against fatigue in flight: A perspective of Australian experience and research
p0553 N78-30272
Mechanisms of fatigue and fracture
p0553 N78-30273
Fracture mechanics fundamentals with reference to aircraft structural applications
p0554 N78-30274
Gust measurements and the N sub o problem
p0554 N78-30276
Development of a load sequence for a structural fatigue test
p0554 N78-30277
Fatigue S/N data in relation to variability in predicted life
p0554 N78-30278
Structural fatigue testing
p0554 N78-30279
Current developments in the life of aircraft structure
p0554 N78-30280
Aircraft structural life monitoring and the problem of corrosion
p0554 N78-30281
NDI and the detection of fatigue
p0554 N78-30282
The development of the theory of structural fatigue
p0555 N78-30283
Aircraft structural reliability and risk theory: A review
p0555 N78-30284
Load interaction effects in fatigue crack propagation
p0555 N78-30285
A model of crack-tip behaviour for fatigue life determination
p0555 N78-30286
Fibre composite reinforcement of cracked aircraft structures
p0555 N78-30288
A theoretical study of the performance of a number of different axial-flow turbine configurations under conditions of pulsating flow
[ARL/MECH-ENG-REPT-149] p0562 N78-31104

AERONAUTICAL SYSTEMS DIV., WRIGHT-PATTERSON AFB, OHIO.
A study of task loading using a three man crew on a KC-135 aircraft
[AD-A044257] p0023 N78-10056
Microwave landing system utilization and conventional avionics
[AD-A044297] p0083 N78-12055
Crew composition study for an Advanced Tanker/Cargo Aircraft (ATCA)
[AD-A043969] p0084 N78-12070
A study of task loading using a four-man crew on a KC-135 aircraft (GIANT BOOM)
[AD-A044104] p0085 N78-12071
ASD strobe light evaluation
[AD-A045533] p0095 N78-13036
Military transport (C-141) fly-by-wire program
[AD-A046163] p0143 N78-14056
Recess fasteners
[AD-A053221] p0443 N78-26449
Cargo aircraft and spacecraft forward restraint criteria
[AD-A055343] p0561 N78-31095
B-1 EMUX automated logic diagrammer demonstration program
[AD-A056964] p0626 N78-33092

AEROPLANE AND ARMAMENT EXPERIMENTAL ESTABLISHMENT, BOSCOMBE DOWN (ENGLAND).
V/STOL flying qualities requirements in the UK
p0258 N78-19103

AEROSPACE CORP., EL SEGUNDO, CALIF.
Characteristics of 5- to 35- turn uniform helical antennas
[AD-A046487] p0153 N78-15368
Fault-tolerant software for aircraft control systems
[NASA-CR-145298] p0251 N78-18797
Linearized Newtonian aerodynamics of slender inflated cones
[AD-A048695] p0254 N78-19064

AEROSPACE MEDICAL RESEARCH LABS., WRIGHT-PATTERSON AFB, OHIO.
Community noise exposure resulting from aircraft operations. Volume 3: Acoustic data on military aircraft, Air Force attack/fighter aircraft
[AD-A053701] p0495 N78-28888
Community noise exposure resulting from aircraft operations. Volume 2: Acoustic data on military aircraft, Air Force bomber/cargo aircraft
[AD-A053700] p0495 N78-28889
USAF bioenvironmental noise data handbook. Volume 83: KC-135A aircraft, near and far-field noise
[AD-A054138] p0495 N78-28893

Terrain Contour Matching (TERCOM): Sensitivity to heading and ground-speed errors
[AD-A056127] p0609 N78-32084
AEROSPACE SYSTEMS, INC., BURLINGTON, MASS.
Aerodynamic interference effects on tilting proprotor aircraft
[NASA-CR-152053] p0092 N78-13007
Rotor wake effects on hub/pylon flow. Volume 1: Theoretical formulation
[AD-A055921] p0607 N78-32070
Rotor wake effects on hub/pylon flow. Volume 2: Program SHAPES user's manual
[AD-A055767] p0607 N78-32071
AEROVIRONMENT, INC., PASADENA, CALIF.
Aircraft vortex wake decay near the ground
[AD-A042878/8] p0019 N78-10024
AIR FORCE AERO PROPULSION LAB., WRIGHT-PATTERSON AFB, OHIO.
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Understanding turbine secondary flow
p0041 N78-11097
A cascade in unsteady flow
[AD-A045319] p0091 N78-12381
Propeller acoustics test facility (capability description)
[AD-A045409] p0102 N78-13857
Quiet propeller/rotor concept evaluation
[AD-A047297] p0197 N78-16047
Low frequency combustion instability in augmentors
p0321 N78-21138
Aircraft hazard detection and control utilizing an aircraft data acquisition system
[AD-A054416] p0500 N78-29092
Hydrogen content of hydrocarbon fuels by a low-resolution nuclear resonance method
[AD-A054465] p0503 N78-29262
Advance nozzle technology
p0550 N78-30111
AIR FORCE AVIONICS LAB., WRIGHT-PATTERSON AFB, OHIO.
Avionics maintenance study
[AD-A042568] p0017 N78-10003
AIR FORCE CIVIL AND ENVIRONMENTAL ENGINEERING OFFICE, TYNDALL AFB, FLA.
Smoke abatement for DOD test cells
[AD-A050223] p0310 N78-20148
AIR FORCE CIVIL ENGINEERING CENTER, TYNDALL AFB, FLA.
An evaluation of the bird/aircraft strike hazard, Malmstrom AFB, Montana
[AD-A049637] p0303 N78-20095
Runway roughness evaluation laser profilometer implementation study
[AD-A049440] p0324 N78-21165
AIR FORCE FLIGHT DYNAMICS LAB., WRIGHT-PATTERSON AFB, OHIO.
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
Crew escape capsule retrorocket concept. Volume 1: Demonstration program
[AD-A042337] p0021 N78-10038
Crew escape capsule retrorocket concept. Volume 2: Selection of a retrorocket system
[AD-A042218] p0021 N78-10039
Collection of commercial aircraft characteristics for study of runway roughness
[AD-A042623/9] p0030 N78-10118
AWIS operational flight test
[AD-A043814] p0037 N78-11050
The use of multifunction keyboards in single-seat Air Force cockpits
[AD-A044076] p0096 N78-13044
Development tests and flight test of graphite composite landing gear side brace assembly for A37-B aircraft
[AD-A045761] p0097 N78-13050
An exposition on aircraft response to atmospheric turbulence using power spectral density analysis techniques
[AD-A046108] p0143 N78-14057
Simulated lightning test on the Navy Airborne Light Optical Fiber Technology (ALOFT) A-7 aircraft
[AD-A046370] p0149 N78-15030
Including fleet usage variability in reliability analyses for both safety and economic limit
[AD-A047714] p0212 N78-17398
Cambered jet-flapped airfoil theory with tables and computer programs for application
[AD-A048528] p0237 N78-18006
Critical issues in viscous flow computations
p0270 N78-19792
Pressure cycling fatigue tests of F-111 crew module glass transparencies
[AD-A049625] p0306 N78-20119
Estimating times to early failures using finite data to estimate the Weibull scale parameter
[AD-A050263] p0310 N78-20524
Flight performance of the BQM-34A target drone with wing-tip mounted pods
[AD-A050834] p0349 N78-22079
Terrain following criteria: The need for a cannon measure
p0432 N78-26060
Performance methods for aircraft and missiles
p0434 N78-26075
Transonic unsteady aeroelastic phenomena
p0438 N78-26117
Modal investigation of lightweight aircraft structures using digital techniques
[AD-A053782] p0453 N78-27114
Digital simulation of flexible aircraft response to symmetrical and asymmetrical runway roughness
[AD-A053588] p0499 N78-29087
A calculator program for analyzing airloads on a wing of arbitrary planform and camber in subsonic flow
[AD-A054180] p0545 N78-30058
Computer program for vibration prediction of fighter aircraft equipments
[AD-A054598] p0548 N78-30094
Supercruiser fighter analysis
p0549 N78-30107
M=3 turbulent boundary layer measurements at very high Reynolds numbers
[AD-A055952] p0607 N78-32072
Air Force Flight Dynamics Laboratory fiscal year 1979. Technical objective document
[AD-A055711] p0621 N78-32911
AIR FORCE FLIGHT TEST CENTER, EDWARDS AFB, CALIF.
Stability and control flight test techniques, volume 2
[AD-A042593] p0030 N78-10113
Stability and control flight test theory, volume 1
[AD-A042583] p0042 N78-11115
Investigation of pitot and static system leak effects
[AD-A044956] p0086 N78-12079
B-1 terrain-following development
p0432 N78-26061
AIR FORCE GEOPHYSICS LAB., HANSCOM AFB, MASS.
Ionospheric effects on satellite navigation and air traffic control systems
p0365 N78-23325
AIR FORCE HUMAN RESOURCES LAB., BROOKS AFB, TEX.
User acceptance and usability of the C-141 job guide technical order system
[AD-A044001] p0017 N78-10004
Display and speech devices for simulator instructor/operator station applications
[AD-A049247] p0266 N78-19169
AIR FORCE HUMAN RESOURCES LAB., WILLIAMS AFB, ARIZ.
Proceedings of the 1977 Image Conference
[AD-A044582] p0090 N78-12109
AIR FORCE INST. OF TECH., WRIGHT-PATTERSON AFB, OHIO.
A feasibility study to develop optimization algorithms for aircraft structures
[AD-A044190] p0023 N78-10057
A study of opportunistic replacement tactics for modular jet engine management
[AD-A044184] p0079 N78-12001
Simulation of an air traffic control terminal area
[AD-A044211] p0083 N78-12056
An analysis of the exponential function as the underlying distribution for describing failures in inertial measurement units
[AD-A044189] p0083 N78-12057
A method for augmenting the advanced configuration management system for nations operating F-4 aircraft under the United States International Logistics Program
[AD-A044173] p0084 N78-12068
An investigation of the relationship of section production costs to total production costs of gas turbine engines
[AD-A044172] p0087 N78-12091

An analysis of information sources for the estimation of life cycle operating and maintenance costs of turbine engines
[AD-A044082] p0088 N78-12094
An identification and characterization of cost models/techniques used by Air Force Logistics Command to estimate jet engine operation and support costs
[AD-A044083] p0088 N78-12095
Corrosion predictability in F-4 aircraft assigned to the Pacific Air Forces
[AD-A045277] p0096 N78-13049
An investigation into the nature of aircraft supportability in the CILC environment
[AD-A047226] p0193 N78-15991
An analysis of user acceptance and perceived usability of C-141A job guides
[AD-A047141] p0193 N78-15992
An evaluation of the capability of the logistics composite model to project the monthly aircraft sortie effectiveness of an F-15 wing
[AD-A047227] p0193 N78-15993
A methodology for estimating the economic benefits of an aircraft engine warranty
[AD-A047282] p0199 N78-16057
An assessment of relevant decision making factors for organic versus contract maintenance options on USAF flight simulators
[AD-A047136] p0200 N78-16070
A discrete-event digital simulation model of the F-16 fire control computer operational flight program using simscript 2.5
[AD-A048164] p0207 N78-17047
Development of cost estimating relationships for aircraft jet core-engine overhaul costs
[AD-A047667] p0209 N78-17067
Aircraft compensator design methods
[AD-A047814] p0210 N78-17073
The effects of external stores on the flutter of a non-uniform cantilever
[AD-A048360] p0246 N78-18078
An experimental investigation of steady asymmetric vortex shedding from a slender body of revolution at high angles of attack
[AD-A048370] p0253 N78-19062
An aerodynamic investigation of a forward swept wing
[AD-A048898] p0254 N78-19069
Doublet lattice aerodynamic predictions for an oscillating F-5 wing with stores
[AD-A048968] p0254 N78-19070
Magnus effects on ballistic trajectories
[AD-A048966] p0254 N78-19071
Design and evaluation of a side force generator modification for the XBQM-1 remotely piloted vehicle
[AD-A048901] p0260 N78-19122
A feasibility study of a manual bomb release while in a turn
[AD-A048882] p0261 N78-19123
Analysis and design of a cooled supercritical airfoil test model
[AD-A048895] p0265 N78-19168
A general study of hybrid composite laminates
[AD-A048364] p0266 N78-19208
An economic analysis of a government sponsored, commercial convertible aircraft
[AD-A047633] p0303 N78-20096
Improving readiness: A cost-effective approach
[AD-A050765] p0345 N78-22021
An atomic fluorescence system using a continuum source for the rapid determination of wear metals in jet engine lubricating oils
[AD-A052721] p0401 N78-24320
An investigation of the tracking performance of the fire fly manual director gunsight for air-to-air gunnery
[AD-A053348] p0407 N78-25083
A study of the F-4 Program Management Responsibility Transfer (PMRT) from the Air Force Systems Command to the Logistics Command
[AD-A052903] p0413 N78-25974
Optimal missile evasion
[AD-A053267] p0439 N78-26135
The design and simulation of a takeoff stabilization system for an aircraft with an air cushion landing system
[AD-A053220] p0440 N78-26137
Investigation of a discrete C-Star transient response controller for the YF-16 at a selected flight condition
[AD-A053441] p0456 N78-27139
The design of an optimum alphanumeric symbol set for cockpit displays
[AD-A053447] p0500 N78-29097
A design of trajectory estimator using multiple DME range measurements
[AD-A055191] p0560 N78-31077
Performance in a jamming environment of a low-cost GPS user receiver algorithm for aiding a tactical INS
[AD-A055239] p0560 N78-31078
The terrain following task for the advanced tactical fighter using discrete optimal control
[AD-A055196] p0565 N78-31121
Optimal terrain following controller for an optimized spline reference path
[AD-A055234] p0565 N78-31122
Software design for a Visually-Coupled Airborne Systems Simulator (VCASS)
[AD-A055226] p0566 N78-31133
Analysis of monopole antenna arrays on cylinders by the geometrical theory of diffraction
[AD-A055197] p0567 N78-31335
An extended Kalman filter fire control system against air-to-air missiles, volume 2
[AD-A055637] p0610 N78-32091
Pitch rate flight control for the F-16 aircraft to improve air-to-air combat
[AD-A055417] p0612 N78-32107
Mechanization of blended A sub N mode for CCV YF-16
[AD-A056553] p0626 N78-33089
Development of a symbology exerciser for display generation and analysis on the visually-coupled airborne systems simulator (VCASS)
[AD-A055464] p0630 N78-33124

AIR FORCE INSTRUMENT FLIGHT CENTER, RANDOLPH AFB, TEX.
Evaluation of jet 2 inch standby flight instrument system
[AD-A051798] p0361 N78-23087

AIR FORCE MATERIALS LAB., WRIGHT-PATTERSON AFB, OHIO.
The economic implications of NDE: Opportunities and payoff
p0443 N78-26463
Fundamentals of noncuring sealants for aircraft fuel tanks
[AD-A054627] p0553 N78-30247

AIR FORCE OCCUPATIONAL AND ENVIRONMENTAL HEALTH LAB., KELLY AFB, TEX.
Acoustic performance of the A/M32A-52 exhaust muffler (modified) during KC-135A aircraft ground runup operation
[AD-A046585] p0151 N78-15053

AIR FORCE PACKAGING EVALUATION AGENCY, WRIGHT-PATTERSON AFB, OHIO.
Evaluation of F-16 radar attachment assemblies for reusable containers
[AD-A053424] p0459 N78-27432

AIR FORCE SYSTEMS COMMAND, WRIGHT-PATTERSON AFB, OHIO.
A minimum inductive resistance wing near the surface of the earth
[AD-A044690] p0082 N78-12042
Regularization of the singular integral equation for a wing in an unsteady subsonic gas flow
[AD-A044670] p0082 N78-12044
Economic problems of determining the durability of aircraft engines
[AD-A044672] p0088 N78-12096
Hydromechanical properties of an isolated wing moving above a screen
[AD-A044692] p0091 N78-12379
Approximate nonlinear theory of rectangular wing of small aspect ratio moving near a fluid screen at large Froude numbers
[AD-A044693] p0091 N78-12387
Investigation of velocity field behind low-flying wing with fuselage
[AD-A045073] p0093 N78-13020
Lateral stability of an aircraft and vibrations of the ailerons while taking into consideration elastic deformation of the wings and the elasticity of the control system
[AD-A045440] p0099 N78-13072

Study on stage of centrifugal compressor with air turbine
[AD-A045436] p0101 N78-13452
Increasing the survivability of combat aircraft
[AD-A045910] p0140 N78-14038
Brake-plates for aeroplanes
[AD-A045932] p0143 N78-14150
Epoxy and polyurethane paint compositions for agricultural airplanes
[AD-A045914] p0144 N78-14173
Movement of a tilted wing near a screen
[AD-A045920] p0144 N78-14347
Movement of a wing with a small aspect ratio near the interface of fluids with different densities
[AD-A045921] p0145 N78-14348
Heat-resistant equipment for bending shaped material with electrical heating
[AD-A045909] p0145 N78-14411
Movement of a solid profile near a solid boundary
[AD-A045926] p0147 N78-15006
Some problems of exploitation of jet turbine aircraft engines of Lot Polish Air Lines
[AD-A046221] p0151 N78-15048
Suspension fuels. One type of hopeful high energy fuel
[AD-A045908] p0153 N78-15294
Investigation of aerodynamic characteristics of V-wings near solid surface
[AD-A048555] p0236 N78-18003
The movement of a wing with deflected ailerons close to a screen
[AD-A048651] p0237 N78-18004
The development of fatigue/crack growth analysis loading spectra
p0241 N78-18048
Static stability of vehicles which use the lifting force of airfoils
[AD-A049069] p0255 N78-19074
A wing in an unsteady gas flow, part 1
[AD-A048999] p0255 N78-19077
A wing in an unsteady gas flow, part 2
[AD-A049000] p0255 N78-19078
A wing in an unsteady gas flow, part 3
[AD-A049001] p0255 N78-19079
Fuel pressure increase limiter
[AD-A049393] p0319 N78-21117
Supersonic flow-around of thin bodies with Mach number close to unity
[AD-A051884] p0358 N78-23059
Method of calculation of nonstationary aerodynamic characteristics of a low-flying wing with a cylindrical fuselage
[AD-A051978] p0359 N78-23062
Invariant automatic stabilization system of vertical takeoff and landing aircraft (VTOL) under steady flight conditions
[AD-A051637] p0363 N78-23102
Aeronautical knowledge, selected articles
[AD-A051710] p0367 N78-23986
Nonlinear theory of a bearing surface of arbitrary extent
[AD-A051385] p0394 N78-24090
Bases of radio direction finding, part 1
[AD-A051951] p0395 N78-24107

AIR FRANCE, PARIS.
An operator's viewpoint: How to reduce the fuel consumption in aeronautical maintenance
[AAAF-NT-77-26] p0397 N78-24129

AIRCRAFT RESEARCH AND DEVELOPMENT UNIT, LAVERTON (AUSTRALIA).
Evaluation of slimpack style parachute in CT4A airtrainer aircraft
[AD-A047083] p0195 N78-16024

AIRESEARCH MFG. CO., PHOENIX, ARIZ.
Pollution reduction technology program for small jet aircraft engines: Class T1
p0039 N78-11070
Cost/benefit analysis of advanced material technologies for small aircraft turbine engines
[NASA-CR-135265] p0086 N78-12083
Fabrication and test of a fluidic fuel-control and bleed-air-load-control system for gas turbine engines
[AD-A049039] p0265 N78-19163
Evaluation of a pressurized air start system for advanced army helicopters
[AD-A051967] p0360 N78-23082
Advanced technology servicing equipment for army aircraft
[AD-A052652] p0400 N78-24158
Ceramic technology readiness program
[PE-2664-3] p0457 N78-27279
Pollution Peduction Technology Program for small jet aircraft engines, phase 2
[NASA-CR-159415] p0628 N78-33104

AIRESEARCH MFG. CO., TORRANCE, CALIF.
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
Design criteria for application of membrane nitrogen inerting systems to army aircraft fuel tanks
[AD-A052869] p0439 N78-26136

AIRLINE PILOTS ASSOCIATION, DENISON, TEX.
Problems pilots face involving wind shear
p0268 N78-19722

ALDEN ELECTRONIC AND IMPULSE RECORDING EQUIPMENT CO., WASHINGTON, D. C.
Aviation weather service requirements, 1980 - 1990
p0267 N78-19713

ALUMINUM CO. OF AMERICA, ALCOA CENTER, PA.
Exploratory development for design data on structural aluminum alloys in representative aircraft environments
[AD-A052809] p0401 N78-24344

AMERICAN AIRLINES, INC., TULSA, OKLA.
A new method for estimating current and future transport aircraft operating economics
[NASA-CR-145190] p0303 N78-20094

ANALYTIC SCIENCES CORP., READING, MASS.
Modern methods of aircraft stability and control analysis
[AD-A043399] p0030 N78-10114
Evaluation of digital flight control design for VTOL approach and landing
p0433 N78-26065
Missile aerodynamic parameter and structure identification from flight test data
[AD-A056343] p0623 N78-33055

ANALYTICAL MECHANICS ASSOCIATES, INC., JERICHO, N.Y.
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
Automated landing, rollout, and turnoff using MLS and magnetic cable sensors
[NASA-CR-2907] p0021 N78-10042

ANALYTICAL MECHANICS ASSOCIATES, INC., MOUNTAIN VIEW, CALIF.
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Development and flight tests of a Kalman filter for navigation during terminal area and landing operations
[NASA-CR-3015] p0452 N78-27105

APPLI-MATION, INC., ORLANDO, FLA.
Instructor pilot's role in simulation training, phase 2
[AD-A047919] p0212 N78-17082

APPLI-MATION, INC., SAN DIEGO, CALIF.
Automated weapon system trainer: Expanded adaptive module for basic instrument flight maneuvers
[AD-A048498] p0247 N78-18087

APPLIED DEVICES CORP., KISSIMMEE, FLA.
A modular adaptive, variable function flight control sensor
[AD-A055175] p0564 N78-31120

APPLIED PHYSICS LAB., JOHNS HOPKINS UNIV., LAUREL, MD.
System definition and investigation of the on site processing of en route sensor signals. Addendum: Investigation into possible en route on site beacon ring around discriminants
[AD-A056941] p0625 N78-33070

ARINC RESEARCH CORP., ANNAPOLIS, MD.
Investigation to support phase 1 of the USAF midair prevention systems program (MAPS)
[AD-A049743] p0314 N78-21066
A study of the economic impact of selected communications alternatives, present system definition
[AD-A052162] p0365 N78-23285

Logistics and operational effectiveness of the P-3 aircraft
[AD-A052239] p0404 N78-25050
Avionics planning guidance: Executive summary
[AD-A054719] p0500 N78-29098
Evaluation of methods for calculating system operating time in accordance with Reliability Improvement Warranty (RIW) contractual terms
[AD-A054822] p0547 N78-30079
Avionics cost development for alternatives of selected air traffic control systems
[AD-A054823] p0547 N78-30080
Program analyses for the S-3 weapon system improvement program
[AD-A055887] p0561 N78-31093
Experimental test plan for the evaluation of aircraft separation assurance displays using airline flight simulators
[AD-A055849] p0566 N78-31134
Investigation of the technical and operational feasibility of using a VHF data link for transmission of Intermittent Positive Control (IPC) volume 1
[AD-A055444] p0615 N78-32330
Description of a model for evaluating operational performance of communications system
[AD-A057199] p0632 N78-33313

ARIZONA STATE UNIV., TEMPE.
Preliminary comparison of model and prototype wakes
[AIAA PAPER 78-254] p0162 A78-20774
Assessing instrument sensitivity for heading and attitude information
[AD-A046065] p0141 N78-14045
Sensitivity analysis of optimal flight trajectories
p0196 N78-16041

ARIZONA UNIV., TUCSON.
A new method for designing shock-free transonic configurations
[AIAA PAPER 78-1114] p0475 A78-45127
Unsteady transonic flow computations
[AD-A049188] p0254 N78-19068

ARMY AEROMEDICAL RESEARCH LAB., FORT RUCKER, ALA.
Subjective ratings of annoyance produced by rotary-wing aircraft noise
[AD-A043435] p0032 N78-10609
Toxicologic gas evaluation of the utility tactical transport aircraft system (UH-60)
[AD-A047801] p0207 N78-17046

ARMY AGENCY FOR AVIATION SAFETY, FORT RUCKER, ALA.
Antitorque training: Evaluation of effectiveness in reducing mishap losses
[AD-A055040] p0561 N78-31092

ARMY AIR MOBILITY RESEARCH AND DEVELOPMENT LAB. CLEVELAND, OHIO.
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546

ARMY AIR MOBILITY RESEARCH AND DEVELOPMENT LAB. FORT EUSTIS, VA.
The Advancing Blade Concept (ABC) rotor program
p0263 N78-19143

ARMY AIR MOBILITY RESEARCH AND DEVELOPMENT LAB. HAMPTON, VA.
Externally blown flap impingement parameters
p0390 N78-240

ARMY AIR MOBILITY RESEARCH AND DEVELOPMENT LAB., MOFFETT FIELD, CALIF.
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142

ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND, WATERVLIET, N. Y.
Vibrations of a helicopter rotor blade using finite element unconstrained variational formulations
[AD-A052670] p0397 N78-24125

ARMY AVIATION ENGINEERING FLIGHT ACTIVITY, EDWARDS AFB, CALIF.
Low airspeed sensor location tests AH-1G helicopter
[AD-A044327] p0025 N78-10067
Flight evaluation pacer systems low-range airspeed system LORAS 1000
[AD-A045222] p0097 N78-13055
C-12A landing gear capability tests
[AD-A046554] p0149 N78-15029
Icing evaluation. U-21A airplane with low reflective paint
[AD-A046852] p0149 N78-15033
Flight evaluation rosemount low-range orthogonal airspeed system with 853G sensor
[AD-A046491] p0150 N78-15036
Flight evaluation J-TEC VT-1003 vector airspeed sensing system
[AD-A046553] p0150 N78-15037
Airworthiness evaluation NUH-1H helicopter with global positioning system
[AD-A047971] p0242 N78-18053
Modified helicopte. icing spray system evaluation
[AD-A055039] p0561 N78-31091

ARMY AVIATION RESEARCH AND DEVELOPMENT COMMAND, MOFFETT FIELD, CALIF.
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067

ARMY AVIATION RESEARCH AND DEVELOPMENT COMMAND, ST. LOUIS, MO.
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
Computerized aircraft attrition program
[AD-A055784] p0561 N78-31094
Noise requirements from a military point of view
p0619 N78-32819

ARMY AVIATION SYSTEMS COMMAND, ST. LOUIS, MO.
Projected needs of US Army Aviation
p0261 N78-19127
The US Army UTTAS and AAH programs
p0262 N78-19131

ARMY COLD REGIONS RESEARCH AND ENGINEERING LAB. HANOVER, N. H.
Freeze-thaw tests of liquid deicing chemicals on selected pavement materials
[AD-A051771] p0493 N78-28279
Interaction of a surface wave with a dielectric slab discontinuity
[AD-A055956] p0615 N78-32327

ARMY CONSTRUCTION ENGINEERING RESEARCH LAB., CHAMPAIGN, ILL.
Development of a pavement maintenance system. Volume 1: Airfield pavement condition rating
[AD-A048884] p0310 N78-20147
Development of a pavement maintenance management system. Volume 2: Airfield pavement distress identification manual
[AD-A049029] p0324 N78-21170
Rotary-wing aircraft operational noise data
[AD-A051999] p0367 N78-23879

ARMY ELECTRONICS COMMAND, FORT HUACHUCA, ARIZ.
An approach guidance system for remotely-piloted vehicles
[AD-A041561] p0022 N78-10043

ARMY ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.
Analysis of permanent deformations of flexible airport pavements
[AD-A044269/9] p0099 N78-13079
Engineering behavior of pavement materials: State of the art
[AD-A045272/2] p0144 N78-14183

Design and construction of continuously reinforced concrete airport pavements
[AD-A049970/7] p0354 N78-22118
Lake Erie international jetport-model feasibility investigation. Report 17-9: Results of numerical three-dimensional wind-driven circulation analysis for thermally stratified lake conditions
[AD-A050614] p0354 N78-22120
Airfield pavement smoothness requirements
[AD-A050921] p0502 N78-29111
ARMY INST. FOR ADVANCED RUSSIAN AND EAST EUROPEAN STUDIES, APO NEW YORK. 09053
The Soviet attack helicopter
[AD-A050649] p0349 N78-22080
ARMY MATERIALS AND MECHANICS RESEARCH CENTER, WATERTOWN, MASS.
Case studies in fracture mechanics
[AD-A045877] p0102 N78-13482
TRIP steels promise high reliability hardware
[AD-A052765] p0401 N78-24348
ARMY MISSILE RESEARCH AND DEVELOPMENT COMMAND, REDSTONE ARSENAL, ALA.
Aeroballistic study of an attack mini-RPV
[AD-A044028] p0084 N78-12067
Detection of flaws in metallic and non-metallic composite structures using liquid crystal technology
p0445 N78-26480
A method for validating missile system simulation models
[AD-A055689] p0613 N78-32169
ARMY MOBILITY EQUIPMENT RESEARCH AND DEVELOPMENT CENTER, FORT BELVOIR, VA.
Evaluation of military specification aircraft coatings (AVSCOM no. 77-18)
[AD-A046708] p0153 N78-15284
Comparison tests on the 100-GPM electrokinetic fuel decontaminator and a 100-GPM military standard filter/separator
[AD-A048655] p0248 N78-18226
ARMY NATICK RESEARCH AND DEVELOPMENT COMMAND, MASS.
Accordion shelter hardware analysis
[AD-A053592] p0492 N78-28278
ARMY RESEARCH AND TECHNOLOGY LABS., FORT EUSTIS, VA.
A study of the desirability and feasibility of in-flight escape from Army helicopters
[AD-A051153] p0359 N78-23071
A technique for monitoring flight-test envelope expansion
[AD-A051163] p0361 N78-23083
Approaches to combat damage repair
p0491 N78-28089
CH-47 crash test (T-40) structural, cargo restraint, and air crew inflatable restraint experiments
[AD-A055804] p0608 N78-32077
ARMY RESEARCH AND TECHNOLOGY LABS., MOFFETT FIELD, CALIF.
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
Army aviation RDT and E plan, sixth edition
[AD-A049214] p0271 N78-20010
Army research and technology laboratories, FY 1977
[AD-A049212] p0271 N78-20011
Army aviation RDT and E plan. Sixth edition: Executive summary
[AD-A049213] p0271 N78-20012
ARMY TEST AND EVALUATION COMMAND, ABERDEEN PROVING GROUND, MD.
Electrical systems (vehicles and weapon subsystems)
[AD-A045343] p0090 N78-12335
Arrival inspections/pre-operational inspections (aviation materiel)
[AD-A047260] p0202 N78-16376
Test operations procedures physical characteristics aviation material
[AD-A053196] p0408 N78-25086
Aircraft military utility and functional tests
[AD-A053617] p0500 N78-29091
Physical characteristics: Aviation materiel
[AD-A055803] p0610 N78-32093
Aircraft defogging and defrosting (transparent area)
[AD-A056976] p0626 N78-33094
ARMY TROOP SUPPORT AND AVIATION MATERIEL READINESS COMMAND, ST. LOUIS, MO.
Bell UH-1H RAM/LOG report
[AD-A057231] p0626 N78-33091
ARMY WAR COLL., CARLISLE BARRACKS, PA.
Improving reliability of avionics equipments through engineering testing
[AD-A042454] p0024 N78-10064
ARO, INC., ARNOLD AIR FORCE STATION, TENN.
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Critical sting length as determined by the measurement of pitch-damping derivatives for laminar, transitional and turbulent boundary layers at Mach no. 3 for reduced frequencies of 0.0033 and 0.0056
[AD-A042747] p0020 N78-10033
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
[AD-A043543] p0029 N78-10107
Infrared radiation from the exhaust jet of a J85-GE-5 turbojet
[AD-A043282] p0042 N78-11110
A study of acoustic disturbances and means of suppression in ventilated transonic wind tunnel walls
[AD-A045347] p0100 N78-13080
Effects of acoustic and vortical disturbances on the turbulent boundary layer at free-stream Mach number 0.5
[AD-A047921] p0205 N78-17026
Optical measurements of NO and NO sub 2 in the exhaust of an F101-GE-100 engine at simulated altitudes
[AD-A047882] p0210 N78-17068
Computational aerodynamics requirements in conjunction with experimental facilities
p0269 N78-19788
A parametric investigation of the annular jet concept for obtaining afterbody drag data at transonic Mach numbers
[AD-A050891] p0345 N78-22032
An aerodynamic coefficient prediction technique for slender bodies with low aspect ratio fins at Mach numbers from 0.6 to 3.0 and angles of attack from 0 to 180 degrees
[AD-A051797] p0359 N78-23060
Simplified input for certain aerodynamic nose configurations to the Grumman quick-geometry system. A KWIKNOSE user's manual
[AD-A051425] p0394 N78-24089
Development of improved 3DOF analysis capabilities in the AEDC-VKF continuous wind tunnels
[AD-A053939] p0450 N78-27088
Influences of sway braces and mounting gaps on the static aerodynamic loading of external stores
[AD-A054963] p0607 N78-32068
ASSOCIATION AERONAUTIQUE ET ASTRONAUTIQUE DE FRANCE, PARIS.
Calculation of the compressible boundary layer around a profile
[AAAF-NT-77-08] p0034 N78-11019
Boron aluminum composite materials
[AAAF-NT-77-38] p0355 N78-22170
Helicopters and energy savings
[AAAF-NT-77-25] p0397 N78-24128
Supersonic transportation faced with energy savings
[AAAF-NT-77-28] p0397 N78-24131
ATLANTIC RICHFIELD CO., HARVEY, ILL.
Jet fuels from synthetic crudes
p0461 A78-43415
AUBERT ET DUVAL, NEUILLY-SUR-SEINE (FRANCE).
Medium and high resistance steels
[AAAF-NT-77-36] p0355 N78-22223
AUBURN UNIV., ALA.
Analysis and comparison of several methods for computing aerodynamic compressibility and interference effects up to critical Mach numbers
[AD-A050267] p0302 N78-20083
An aerodynamic analysis of deformed wings in subsonic and supersonic flow
[AD-A052449] p0394 N78-24094

AVCO-EVERETT ESEARCH LAB., MASS.
Airborne Oceanographic Lidar System
p0053 A78-14878
AVCO LYCOMING DIV., STRATFORD, CONN.
Improved resistance to engine bird ingestion
[AD-A044203] p0041 N78-11105
Advanced scavenge systems for an integrated engine inlet particle separator
[AD-A047872] p0210 N78-17069
Turbine tip-clearance measurement
[AD-A052042] p0362 N78-23097
YF 102 in-duct combustor noise measurement, volume 1
[NASA-CR-135404-VOL-1] p0412 N78-25827
YF 102 in-duct combustor noise measurement, volume 3
[NASA-CR-135404-VOL-3] p0412 N78-25829
AVCO SYSTEMS DIV., WILMINGTON, MASS.
Hypersonic heat transfer test program in the VKI longshot facility
[AD-A050295] p0302 N78-20086
AVIONS MARCEL DASSAULT, SAINT-CLOUD (FRANCE).
Studies on reinforced plastics
[AAAF-NT-77-40] p0355 N78-22240
AVIONS MARCEL DASSAULT-BREGUET AVIATION, SAINT-CLOUD (FRANCE).
Separation problems encountered by aircraft designers css Div. des Etudes Avancees.
p0249 N78-18377
Electron beam welding titanium elements of an aircraft structure
[AAAF-NT-77-44] p0355 N78-22383
Energy savings. An aircraft constructor's viewpoint
[AAAF-NT-77-24] p0397 N78-24127
Performance predictions of Marcell Dassault-Breguet Aviation aircraft
p0435 N78-26085
Boundary separation problems faced by aircraft designers
p0493 N78-28399
Aerodynamics of the new generation of combat aircraft with delta wings
p0549 N78-30106

B

BATTELLE COLUMBUS LABS., MOUNTAIN VIEW, CALIF.
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075
BATTELLE COLUMBUS LABS., OHIO.
Analytical study of a free-wing/free-trimmer concept
[NASA-CR-2946] p0236 N78-18000
Engineering data on new aerospace materials structural materials
[AD-A054461] p0553 N78-30213
System Avionics Value Estimation (SAVE): An aid for avionics logistics-and-support-cost analyses
[AD-A056348] p0627 N78-33097
BATTELLE PACIFIC NORTHWEST LABS., RICHLAND, WASH.
Assessment of the risk of transporting plutonium dioxide by cargo aircraft
[BNWL-2030] p0138 N78-14019
BEAM ENGINEERING, INC., SUNNYVALE, CALIF.
Acoustical effects of blade tip shape changes on a full scale helicopter rotor in a wind tunnel
[NASA-CR-152082] p0311 N78-20918
BEECH AIRCRAFT CORP., WICHITA, KANS.
Guided drogue flight test report
[AD-A049164] p0254 N78-19067
BELL AEROSPACE CO., BUFFALO, N. Y.
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
BELL HELICOPTER CO., FORT WORTH, T X.
AH-1S high-survivable transmission system
[AD-A047558] p0307 N78-20123
Automatic Inspection, Diagnostic and Prognostic AIDAPS: Test cell data collection and technical support
[AD-A055385] p0612 N78-32109
A data management system for weight control and design-to-cost
p0635 N78-33780
BENDIX CORP., KANSAS CITY, MO.
Material evaluation of polyurethane foam, 0.05 g/ cm 3 density
[BDX-613-1836-REV] p0567 N78-31249
BENDIX CORP., SOUTH BEND, IND.
An evaluation of thermoelectric cooling as applied to engine control electronics
[AD-A042378] p0029 N78-10101
BENDIX CORP., TETERBORO, N. J.
Glide path augmentation with inertial flight path angle
[AD-A046363] p0149 N78-15025
BIHRLE APPLIED RESEARCH, INC., JERICHO, N. Y.
Static aerodynamic characteristics of a typical single-engine low-wing general aviation design for an angle-of-attack range of -8 deg to 90 deg
[NASA-CR-2971] p0544 N78-30048
Rotary balance data for a typical single-engine low-wing general aviation design for an angle-of-attack range of 30 deg to 90 deg
[NASA-CR-2972] p0544 N78-30049
BIOTECHNOLOGY, INC., FALLS CHURCH, VA.
An evaluation of the Navy undersea weapons tank for testing aircrew escape, survival, and rescue procedures and equipment
[AD-A044847] p0083 N78-12051
BOEING AEROSPACE CO., SEATTLE, WASH.
Innovative aircraft design study. Task 2: Design subtask 1. Chemically fueled aircraft. Volume 2: Appendices
[AD-A044319] p0023 N78-10054
Life cycle cost of C-130E weapon system
[AD-A044046] p0023 N78-10058
Cast Aluminum Structures Technology (CAST)
[AD-A043469] p0045 N78-11236
Historical analysis of C-130E resources
[AD-A044712] p0085 N78-12073
Specifications for IDAMST software
[AD-A047163] p0198 N78-16049
Wind models for flight simulator certification of landing and approach guidance and control systems
p0268 N78-19723
Adaptive landing gear for improved taxi performance
[AD-A053733] p0453 N78-27115
Propulsion/flight control integration technology (PROFIT) design analysis status
[NASA-CR-144875] p0501 N78-29101
Propulsion/flight control integration technology (PROFIT) software system definition
[NASA-CR-144876] p0501 N78-29102
BOEING CO., SEATTLE, WASH.
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Upgraded viscous flow analysis of multielement airfoils
[AIAA PAPER 78-1224] p0476 A78-45149
Advanced panel-type influence coefficient methods applied to unsteady three dimensional potential flows
[AIAA PAPER 78-229] p0593 A78-52630
Development of fiber shields for engine containment
p0026 N78-10079
Low speed test of a high-bypass-ratio propulsion system with an asymmetric inlet designed for a tilt-nacelle V/STOL airplane
[NASA-CR-152072] p0209 N78-17062
Computational aerodynamics requirements· The future role of the computer and the needs of the aerospace industry
p0269 N78-19784
Computational Fluid Dynamics (CFD): Future role and requirements as viewed by an applied aerodynamicist
p0269 N78-19789
USB environment measurements based on full-scale static engine ground tests
p0393 N78-24076
Application techniques for digital flight control systems
p0550 N78-30117
BOEING COMMERCIAL AIRPLANE CO., SEATTLE, WASH.
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701

Two-dimensional separated wake modeling and its use to predict maximum section lift coefficient
[AIAA PAPER 78-156] p0174 A78-22590
Fuel saving potential of Mach 0.8 twin engine prop-fan transports
p0287 A78-31306
Non-linear duct acoustics and its application to fan noise
p0329 A78-33090
An improved higher order panel method for linearized supersonic flow
[AIAA PAPER 78-15] p0593 A78-52628
Splined version of FLEXSTAB: A critical analysis of alternate schemes
[NASA-CR-152030] p0020 N78-10027
Aircraft alerting systems criteria study. Volume 1: Collation and analysis of aircraft alerting system data
[AD-A042328/5] p0021 N78-10037
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-145207] p0022 N78-10047
Rotor burst protection criteria and implications
p0025 N78-10071
Aircraft alerting systems criteria study. Volume 2: Human factors guidelines for aircraft alerting systems
[AD-A043383] p0043 N78-11116
The 737 graphite composite flight spoiler flight service evaluation
[NASA-CR-144984] p0044 N78-11199
A user's guide for V174, a program using a finite difference method to analyze transonic flow over oscillating wings
[NASA-CR-145214] p0079 N78-12013
Design and analysis of winglets for military aircraft, phase 2
[AD-A046152] p0140 N78-14035
Flight control electronics reliability/maintenance study
[NASA-CR-145271] p0143 N78-14055
Feasibility study of an Integrated Program for Aerospace vehicle Design (IPAD). Volume 5: Catalog of IPAD technical program elements
[NASA-CR-132395] p0194 N78-16015
Study of metallic structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2743] p0197 N78-16043
The practical application of a finite difference method for analyzing transonic flow over oscillating airfoils and wings
[NASA-CR-2933] p0203 N78-16999
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
Test data report, low speed wind tunnel tests of a full scale lift/cruise-fan inlet, with engine, at high angles of attack
[NASA-CR-152055] p0252 N78-19049
A critical evaluation of the predictions of the NASA-Lockheed multielement airfoil computer program
[NASA-CR-145322] p0301 N78-20076
An improved version of the NASA-Lockheed multielement airfoil analysis computer program
[NASA-CR-145323] p0301 N78-20077
Cockpit displayed traffic information study, part 2
[NASA-CR-156115] p0304 N78-20102
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration, task 3
[NASA-CR-145192] p0305 N78-20112
Study of advanced composite structural design concepts for an arrow wing supersonic cruise configuration
[NASA-CR-2825] p0306 N78-20116
Application of advanced technologies to small, short-haul aircraft
[NASA-CR-152089] p0348 N78-22074
Application of laminar flow control to large subsonic military transport airplanes
[AD-A052422] p0394 N78-24098
Low frequency cabin noise reduction based on the intrinsic structural tuning concept: The theory and the experimental results, phase 2
[NASA-CR-145262] p0404 N78-24900
Flight effects on noise by the JT8D engine with inverted primary/fan flow as measured in the NASA-Ames 40 by 80 foot wind tunnel
[NASA-CR-2996] p0441 N78-26149
Transition from glass to graphite in manufacture of composite aircraft structure
p0448 N78-27065
Application of laminar flow control technology to long-range transport design
p0449 N78-27070
A Mach line panel method for computing the linearized supersonic flow over planar wings
[NASA-CR-152126] p0450 N78-27087
JT9D engine diagnostics. Task 2: Feasibility study of measuring in-service flight loads
[NASA-CR-135395] p0454 N78-27124
Application of winglets and/or wing tip extensions with active load control on the Boeing 747
p0496 N78-29050
Active control technology to maximize structural efficiency
p0497 N78-29053
Advanced composite wing study program. Volume 1: Executive summary
[NASA-CR-145382-1] p0613 N78-32185
Advanced composites wing study program, volume 2
[NASA-CR-145382-2] p0613 N78-32186
Adhesive bonded aerospace structures standardized repair handbook
[AD-A055684] p0614 N78-32270
Wing planform geometry effects on large subsonic military transport airplanes
[AD-A056124] p0626 N78-33088

BOEING COMPUTER SERVICES, INC., SEATTLE, WASH.
RIM: A prototype for a relational information management system
p0635 N78-33785

BOEING MILITARY AIRPLANE DEVELOPMENT, SEATTLE, WASH.
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
Preliminary design of a flight control system for a V/STOL airplane with geared variable pitch fans
p0259 N78-19113

BOEING VERTOL CO., PHILADELPHIA, PA.
Wind tunnel investigation of rotor lift and propulsive force at high speed: Data analysis
[NASA-CR-145217-APP-1] p0019 N78-10020
Wind tunnel investigation of rotor lift and propulsive force at high speed. Test data appendix
[NASA-CR-145217-APP-2] p0019 N78-10021
Wind tunnel investigation of rotor lift and propulsive force at high speed: Test data appendix
[NASA-CR-145217-APP-3] p0019 N78-10022
Pilot evaluation of an advanced hingeless rotor XV-15 simulation
[NASA-CR-152034] p0022 N78-10046
Simulation study of gust alleviation in a tilt rotor aircraft, volume 1
[NASA-CR-152050] p0095 N78-13038
Simulation study of gust alleviation in a tilt rotor aircraft, volume 2
[NASA-CR-152051] p0095 N78-13039
Reliability, maintainability, and performance issues in hydraulic system design
[AD-A045237] p0096 N78-13045
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 1
[NASA-CR-2914] p0194 N78-16003
Research requirements to improve safety of civil helicopters
[NASA-CR-145260] p0195 N78-16026
Two-dimensional wind tunnel test of an oscillating rotor airfoil, volume 2
[NASA-CR-2915] p0203 N78-16998
Research requirements to reduce maintenance costs of civil helicopters
[NASA-CR-145288] p0235 N78-17990
Limitations of the CH-47 helicopter in performing terrain flying with external loads
[AD-A048580] p0242 N78-18054
Crashworthy troop seat testing program
[AD-A048975] p0256 N78-19084
The helicopter/ship dynamic-interface problem: A new approach
p0260 N78-19115

Civil and military design requirements and their influence on the product
p0264 N78-19151
Limitations of the UTTAS helicopter in performing terrain flying with external loads
[AD-A047568] p0306 N78-20121
Research requirements to improve reliability of civil helicopters
[NASA-CR-145335] p0316 N78-21093
Bearingless tail rotor loads and stability
[AD-A049579] p0317 N78-21098
Heavy lift helicopter flight control system. Volume 2: Primary flight control system development and feasibility demonstration
[AD-A049580] p0323 N78-21163
Heavy lift helicopter flight control system. Volume 3: Automatic flight control system development and feasibility demonstration
[AD-A050059] p0324 N78-21164
HLH rotor blade manufacturing technology development report
[AD-A050592] p0349 N78-22081
Heavy lift helicopter flight control system. Volume 1: Production recommendations
[AD-A050618] p0353 N78-22113
Engineering services to conduct qualification testing of precision forged spiral bevel gears
[AD-A051542] p0366 N78-23438
Heavy lift helicopters. Advanced Technology component program: Hub and upper controls
[AD-A051348] p0396 N78-24122
Finite element analysis for complex structures, helicopter transmission housing structural modeling
[AD-A052759] p0397 N78-24126
Evaluation of the annoyance due to helicopter rotor noise
[NASA-CR-3001] p0404 N78-24903
Research requirements to reduce civil helicopter life cycle cost
[NASA-CR-145379] p0498 N78-29082
Civil helicopter design and operational requirement
[NASA-CR-145377] p0499 N78-29083
Heavy lift helicopter - advanced technology component program - rotor blade
[AD-A053423] p0499 N78-29089
HLH drive system
[AD-A054024] p0500 N78-29094
Helicopter transmission vibration and noise reduction program. Volume 2: User's manual
[AD-A054827] p0548 N78-30095
Helicopter transmission vibration and noise reduction program. Volume 1: Technical report
[AD-A055104] p0560 N78-31089
Engine/airframe/drive train dynamic interface documentation
[AD-A055766] p0564 N78-31114

BOLT, BERANEK, AND NEWMAN, INC., CAMBRIDGE, MASS.
Acoustical properties of materials and muffler configurations for the 80 by 120 foot wind tunnel
[NASA-CR-152065] p0030 N78-10116
Investigation of acoustic properties of a rigid foam with application to noise reduction in light aircraft
[NASA-CR-132333] p0102 N78-13851
Characterization of nonGaussian atmospheric turbulence for prediction of aircraft response statistics
[NASA-CR-2913] p0197 N78-16044
USB noise reduction by nozzle and flap modifications
p0391 N78-24064
EBF noise reduction through nozzle/flap positioning
p0391 N78-24065
A review of the theory of trailing edge noise
[NASA-CR-3021] p0446 N78-26881
Analysis and in-simulator evaluation of display and control concepts for a terminal configured vehicle in final approach in a windshear environment
[NASA-CR-3034] p0495 N78-28861
Sound of low-speed fans
[CONF-770151-7] p0495 N78-28894
Prediction and reduction of rotor broadband noise
p0619 N78-32821

BOLT, BERANEK, AND NEWMAN, INC., CANOGA PARK, CALIF.
Physical analysis of the impulsive aspects of helicopter noise
[AD-A039715] p0199 N78-16059
Sensitivity of aircraft runup/community noise predictions to excess ground attenuation
[AD-A049067] p0265 N78-19164
NOISEMAP computer program operator manual. Addendum for version 3.4 of NOISEMAP
[AD-A049070] p0271 N78-19849

BORST (HENRY V.) AND ASSOCIATES, WAYNE, PA.
Aerodynamic design and analysis of propellers for mini-remotely piloted air vehicles. Volume 1: Open propellers
[AD-A050593] p0352 N78-22104

BOSTON UNIV., MASS.
Time-domain Green's Function Method for three-dimensional nonlinear subsonic flows
[AIAA PAPER 78-1204] p0423 A78-41894
Steady, Oscillatory and Unsteady, Subsonic and Supersonic Aerodynamics (SOUSSA) for complex aircraft configurations
p0346 N78-22036

BRISTOL UNIV. (ENGLAND).
Construction and testing of a carbon fibre primary structure for a man-powered aircraft wing
[BU-208] p0141 N78-14043

BRITISH AEROSPACE AIRCRAFT GROUP, WOODFORD (ENGLAND).
A computerized aircraft performance system
p0435 N78-26084

BRITISH AIRCRAFT CORP., PRESTON (ENGLAND).
Design considerations for a ground avoidance monitor for fighter aircraft
p0432 N78-26058

BRITISH AIRCRAFT CORP., WARTON (ENGLAND).
Some considerations of the likely tolerance to, and repair of, battle damage in combat aircraft structures
p0491 N78-28090
The design of a high g cockpit
p0550 N78-30118

BRITISH AIRCRAFT CORP. (OPERATING) LTD., BRISTOL (ENGLAND).
Engine non-containment: UK risk assessment methods
p0025 N78-10072

BRITISH AIRWAYS HELICOPTERS LTD., HORLEY (ENGLAND).
British Airways helicopter operations
p0262 N78-19133

BRITISH LIBRARY LENDING DIV., BOSTON SPA (ENGLAND).
Investigating aerodynamic transverse forces in labyrinth seals in cases involving rotor eccentricity
[BLL-CE-TRANS-7083-(9022.09)] p0497 N78-29066

BROOKHAVEN NATIONAL LAB., UPTON, N. Y.
Measurement of vertical velocity fluctuations in the atmospheric boundary layer with a small aircraft
[BNL-23633] p0460 N78-27711

BROOKS AND PERKINS, INC., LIVONIA, MICH.
Gondola system for helicopter transport of external cargo
[AD-A047560] p0306 N78-20120

BUNDESMINISTERIUM DER VERTEIDIGUNG, BONN (WEST GERMANY).
German Army helicopter development and prospects for the future
p0261 N78-19128

BUREAU OF ECONOMIC ANALYSIS, WASHINGTON, D. C.
Measuring the impact on scheduled air lines operations of restrictions in fuel availability
p0250 N78-18549

BURROUGHS CORP., PAOLI, PA.
Numerical aerodynamic simulation facility. Preliminary study extension. Executive summary
[NASA-CR-152106] p0252 N78-19050
Numerical aerodynamic simulation facility. Preliminary study extension
[NASA-CR-152107] p0252 N78-19051

C

CALIFORNIA INST. OF TECH., PASADENA.
Flying-hot-wire study of two-dimensional mean flow past an NACA 4412 airfoil at maximum lift
[AIAA PAPER 78-1196] p0422 A78-41887

CALIFORNIA UNIV., BERKELEY.
Effect of a nonconstant C/m-alpha/ on the

stability of rolling aircraft
p0071 A78-16180
Laboratory studies of lean combustion
p0040 N78-11079
Uncertainties in airport cost analysis and their effect on site selection
p0089 N78-12104
An investigation of short haul air transportation in the southeastern United States
[NASA-CR-152166] p0451 N78-27094
Asymmetric supercritical flow past a double wedge with embedded shocks
p0603 N78-32042
CALIFORNIA UNIV., LIVERMORE. LAWRENCE LIVERMORE LAB.
Rotor design implications for composite material properties
[UCRL-80117] p0553 N78-30182
The High Altitude Pollution Program
[UCRL-50042-77] p0617 N78-32601
CALIFORNIA UNIV., LOS ANGELES.
Peripheral processors for high-speed simulation
p0052 A78-14063
A uniqueness proof for a transonic flow problem
p0225 A78-26599
Multitube turbojet noise-suppression studies using cross-correlation techniques
p0479 A78-45394
CALSPAN CORP., BUFFALO, N. Y.
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
Identification of the stability parameters of an aeroelastic airplane
[AIAA 78-1328] p0482 A78-46528
Wind tunnel model study of the hot exhaust plume from the Compressor Research Facility at Wright-Patterson Air Force Base, Ohio
[AD-A047205] p0201 N78-16072
Studies of heat transfer to gas turbine components
[AD-A048551] p0245 N78-18071
Capabilities of the Navy variable stability X-22A for V/STOL flying qualities R and D
p0259 N78-19105
Computer program for relaxation solutions of the nonlinear small disturbance equations for transonic flow in an axial compressor blade row
[AD-A053744] p0504 N78-29412
CAMBRIDGE UNIV. (ENGLAND).
Experimental study on blade bending vibration
[CUED/A-TURBO/TR-88] p0361 N78-23090
The measurement and interpretation of flow within rotating stall cells in axial compressors
[CUED/A-TURBO/TR-90] p0361 N78-23091
A comparison of experimental results and three-dimensional theoretical predictions for a compressor rotor with inlet-distortion, with special reference to Stalling
[CUED/A-TURBO/TR-91] p0362 N78-23092
Linearized supersonic unsteady flow in cascades
[ARC-R/M-3811] p0545 N78-30065
CANADIAN FORCES BASE, SHEARWATER (NOVA SCOTIA).
Canadian Navy experience with small ship helicopter operations
p0261 N78-19129
CASE WESTERN RESERVE UNIV., CLEVELAND, OHIO.
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Aircraft size and air transport costs
p0395 N78-24112
CENTER FOR NAVAL ANALYSES, WASHINGTON, D.C.
Seakeeping considerations in the employment of V/STOL on Naval ships
p0260 N78-19117
CENTRE D'ETUDES ET DE RECHERCHES, TOULOUSE (FRANCE).
Accurate timing in landings through air traffic control
p0433 N78-26067
CENTRE DE VILLAROCHE, MOISSY (FRANCE).
A review of techniques for the thermal protection of the walls of the combustion chamber and reheating ducts of turboreactors
p0320 N78-21134
CENTRO PER L'AUTOMATICA E. PIAGGIO, PISA (ITALY)
High temperature H2-Air variable geometry combustor and turbine: Test facility and measurements
p0321 N78-21137
CHICAGO UNIV., ILL.
An analysis of three weather-related aircraft accidents
[NASA-CR-155363] p0239 N78-18024
CINCINNATI UNIV., OHIO.
The effect of ambient temperature and humidity on the carbon monoxide emissions of an idling gas turbine
p0013 A78-12557
Stress analysis study in cooled radial inflow turbine
[AIAA PAPER 78-94] p0172 A78-22570
Optimal controls for an advanced turbofan engine
p0183 A78-23893
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
Effect of ambient temperature and humidity on emissions of an idling gas turbine
p0041 N78-11080
Optimization study for high speed radial turbine with special reference to design variables
[NASA-CR-152094] p0209 N78-17063
CITY COLL. OF THE CITY UNIV. OF NEW YORK.
An adaptive learning control system for aircraft
[NASA-CR-156930] p0413 N78-25966
CITY UNIV. OF NEW YORK.
A learning flight control system for the F8-DFBW aircraft
[AIAA 78-1288] p0542 A78-50195
A learning control system with application to flight systems
p0629 N78-33112
CIVIL AEROMEDICAL INST., OKLAHOMA CITY, OKLA.
Emergency escape of handicapped air travelers
[AD-A043269/0] p0020 N78-10036
The 1975 accident experience of civilian pilots with static physical defects
[AD-A045429] p0083 N78-12050
CIVIL AERONAUTICS BOARD, WASHINGTON, D.C.
Airport activity statistics of certificated route air carriers
[AD-A052728] p0395 N78-24102
CIVIL AND ENVIRONMENTAL ENGINEERING DEVELOPMENT OFFICE, TYNDALL AFB, FLA.
Air quality impact of aircraft at 10 USAF bases
[AD-A045464] p0102 N78-13640
Fire fighter tools
[AD-A051687] p0364 N78-23107
Nondestructive pavement evaluation
[AD-A052707] p0400 N78-24159
Photographic measurements of USAF aircraft plume rise
[AD-A054004] p0455 N78-27131
Subisokinetic sampling errors for aircraft turbine engine smoke probes
[AD-A053867] p0455 N78-27132
Equipment to neutralize aircraft fuel spills
[AD-A053862] p0460 N78-27628
CIVIL AVIATION AUTHORITY, REDHILL (ENGLAND).
Engine non-containment: The UK CAA view
p0025 N78-10070
CLARKSON COLL. OF TECHNOLOGY, POTSDAM, N.Y.
Dynamic response of aircraft to unloaded and loaded pavement profiles
[AD-A055703] p0610 N78-32090
CLEVELAND PNEUMATIC TOOL CO., OHIO.
Graphite composite landing gear component: Upper drag brace hardware for F-15 aircraft
[AD-A052764] p0407 N78-25082
COAST GUARD, WASHINGTON, D.C.
Preliminary tests of inflatable liferafts for stability in high winds
[AD-A048722] p0239 N78-18023
COLORADO STATE UNIV., FORT COLLINS.
Review of the Air Force summer study program on the integration of wind tunnels and computers
p0270 N78-19804
COLORADO UNIV., BOULDER.
Numerical solution for some problems concerning unsteady motion of airfoils
p0193 N78-15995
Design of noninteracting flight control systems in the presence of large parameter variations
[NASA-CR-155589] p0200 N78-16064
A simulation model for an enplaning-passenger-vehicle curbside at high-volume airports
p0239 N78-18020

COLUMBIA UNIV., NEW YORK.
Noise transmission into a light aircraft
[AIAA PAPER 78-197] p0160 A78-20739
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
A spectroradiometer for airborne remote sensing
p0298 A78-32396
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION (U. S. HOUSE).
Airport and aircraft noise reduction
[GPO-91-591] p0326 N78-21891
COMMITTEE ON SCIENCE AND TECHNOLOGY (U. S. HOUSE).
Future needs and opportunities in the air traffic control system
[GPO-98-931] p0559 N78-31076
COMPUTATIONAL MECHANICS CONSULTANTS, KNOXVILLE, TENN.
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
COMPUTER SCIENCES CORP., MOUNTAIN VIEW, CALIF.
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
CONNECTICUT INTERNATIONAL CORP., WINDSOR LOCKS.
Development of a frangible approach light
[AD-A043859] p0043 N78-11122
CONTINENTAL AIRLINES, INC., LOS ANGELES, CALIF.
Satellite images to aircraft in flight
p0056 A78-14982
CONTROL DATA CORP., ST. PAUL, MINN.
Preliminary study for a numerical aerodynamic simulation facility. Phase 1: Extension
[NASA-CR-152108] p0252 N78-19052
CORNELL UNIV., ITHACA, N. Y.
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
CORTLAND LINE CO., N. Y.
Design and development of helicopter external cargo sling legs made with Kevlar
[AD-A056951] p0626 N78-33093
CRANFIELD INST. OF TECHNOLOGY BEDFORDSHIRE (ENGLAND).
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721
Leading edge transition on swept wings
p0144 N78-14336
An analysis of the force system of a propeller
[CRANFIELD-AERO-33] p0147 N78-15003
The influence of running propellers on low speed longitudinal static stability trim curves
[CRANFIELD-AERO-34] p0147 N78-15004
CUTLER-HAMMER, INC., FARMINGDALE, N.Y.
Microwave scanning beam landing system, ground station: Performance test report. Volume 1: Executive summary
[NASA-CR-151582] p0139 N78-14021

D

DAYTON UNIV., OHIO.
Satellite images to aircraft in flight
p0056 A78-14982
DAYTON UNIV. RESEARCH INST., OHIO.
A comparative study of two computational methods for calculating unsteady transonic flows about oscillating airfoils
[AD-A056946] p0623 N78-33058
DE HAVILLAND AIRCRAFT CO. LTD., DOWNSVIEW (ONTARIO).
Some aspects of powerplant airframe integration affecting fuel conservation
p0286 A78-31304
DEFENCE RESEARCH ESTABLISHMENT, OTTAWA. (ONTARIO).
Nickel/cadmium aircraft batteries: Battery alarm unit
[AD-A039521] p0310 N78-20631
Nickel/cadmium aircraft batteries: Rapid electrolyte exchange technique
[AD-A039335] p0311 N78-20632
Nickel/cadmium aircraft batteries: Single sensor temperature monitoring
[AD-A037722] p0311 N78-20635
Nickel/cadmium aircraft batteries: Multichannel gassing-rate meter
[AD-A039735] p0311 N78-20636
DEFENSE DOCUMENTATION CENTER, ALEXANDRIA, VA.
Environmental Pollution. Noise pollution-noise effects on human performance
[AD-A041600] p0145 N78-14691
DEFENSE SYSTEMS MANAGEMENT SCHOOL, FORT BELVOIR, VA.
The problem of technology transfer: Real or imagined
[AD-A042961] p0213 N78-17943
The MSG-2 commercial airline concept: A Department of Defense program for reliability-centered maintenance
[AD-A050531] p0347 N78-22068
A proposed mini-management information system for the program manager for Avionics Naval Air Systems Command Headquarters
[AD-A052113] p0367 N78-23981
Three degree intermediate level maintenance of Navy aeronautical materials
[AD-A052389] p0389 N78-24042
Life cost management, methodology, and case studies
[AD-A052388] p0404 N78-24999
Doctrine versus capabilities: A project manager's dilemma with the CH-47 helicopter
[AD-A052376] p0413 N78-25970
DELCO ELECTRONICS, SANTA BARBARA, CALIF.
Electromechanical flight control actuator, volume 2
[NASA-CR-151734] p0413 N78-25986
Electromechanical flight control actuator, volume 3
[NASA-CR-151735] p0413 N78-25987
DEPARTEMENT STRUCTURES B. E. AEROSPATIALE, TOULOUSE (FRANCE).
New structures made of composite materials for high performance combat aircraft
p0550 N78-30114
DEPARTMENT OF THE AIR FORCE, WASHINGTON, D.C.
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
DEPARTMENT OF THE NAVY, WASHINGTON, D. C.
US Navy/Marine Corps rotary wing requirements
p0262 N78-19132
DEPARTMENT OF TRANSPORTATION, WASHINGTON, D. C.
Project Plan: Tower automated ground surveillance system development program
[AD-A051621] p0400 N78-24155
DETROIT DIESEL ALLISON, INDIANAPOLIS, IND.
Pollution reduction technology program for turboprop engines
p0039 N78-11069
The effect of splitter vane circumferential location on the aerodynamic performance of a supersonic compressor cascade
[AD-A043860] p0042 N78-11112
Aerodynamic phenomena in an oscillating transonic MCA airfoil cascade including loading effects
p0347 N78-22066
Research on aeroelastic phenomena in airfoil cascades an experimental investigation of the unsteady aerodynamic of a classical air foil cascade in translation
[AD-A053931] p0458 N78-27369
Aerodynamic performance of conventional and advanced design labyrinth seals with solid-smooth abradable, and honeycomb lands
[NASA-CR-135307] p0459 N78-27427
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, BERLIN (WEST GERMANY).
Acoustic interference effects and the role of Helmholtz number in aerodynamic noise
[DLR-IB-257-77/11] p0251 N78-18878
DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, BRUNSWICK (WEST GERMANY).
Calculation of the nonlinear coefficients of low and medium aspect ratio wings using the vortex lattice procedure in incompressible flow
[DLR-IB-151-76/18] p0034 N78-11016
Parts tests for the landing flap support of the Airbus A-300 B
[DLR-IB-152-77/07] p0038 N78-11056
Fatigue strength of the upper guide rail of the A-300 no. 4 landing flap support (tests, results, and evaluation)
[DLR-IB-152-77/09] p0038 N78-11057
Wear and vibrational strength investigations on the upper track, made of Ti A16 V4, of landing flap 4 of the A 300 B
[DLR-IB-152-77/11] p0038 N78-11058

An investigation on thrust vector control
[DLR-IB-151-76/15] p0043 N78-11118
Description of the new regulating valve for the transonic supersonic wind tunnel
[DLR-IB-151-76/6] p0044 N78-11130
Strength investigations for the application of fiber reinforced plastics to aeronautical equipment fittings
[DLR-IB-152-75/25] p0044 N78-11204
The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008
Determination of dynamic characteristics from flight test data
[DLR-FB-77-26] p0141 N78-14044
Modern concepts for aerodynamic rotor design
[DLR-IB-151-77/11] p0243 N78-18058
DFVLR rotorcraft research
p0263 N78-19146
Accuracy considerations on new Microwave Landing Systems (MLS) from an operational point of view
p0315 N78-21081
Improved aircraft tracking using maneuver statistics enroute and in the terminal area
p0316 N78-21087
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
New model upwind distributions and their influence on the design of gliders
[DLR-IB-151-76/12] p0488 N78-28062
Calculation of pressure distribution, forces and moments for the fighter configuration IAe 60 by panel method
[DLR-IB-151-77/13] p0498 N78-29072
Flame stabilization in a ramjet combustion chamber by means of a pilot gas generator
[DLR-FB-77-54] p0564 N78-31117
The influence of the environment on the elastoplastic properties of adhesives in metal bonded joints
[DLR-FB-77-63] p0567 N78-31251

DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, COLOGNE (WEST GERMANY).
A new technique for controlling the exit flow periodicity of supersonic cascades
p0045 N78-11330
Investigation of the jet wake discharge flow of a heavily loaded centrifugal compressor impeller
[DLR-FB-77-32] p0245 N78-18073
Investigation on temperature distribution near film cooled airfoils
p0320 N78-21127

DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, GOETTINGEN (WEST GERMANY).
Unsteady pressure measurements on wing-store combinations in incompressible flow
[DLR-FB-77-12] p0034 N78-11017
Numerical calculation of unsteady aerodynamic pressure distribution on harmonically oscillating wings in subsonic flow. Theory and results for compressible flow, part 2
[DLR-FB-77-15] p0138 N78-14015
Contributions to steady and unsteady aerodynamics
[DLR-FB-77-34] p0204 N78-17004
Significance of structural nonlinearities from the structural dynamics and aeroelasticity point of view
p0204 N78-17005
The stall problem
p0204 N78-17006
Unsteady aerodynamic forces on harmonically oscillating pointed circular conical shells with small aperture angle
p0204 N78-17007
The interference problem of the oscillating fuselage near ground
p0204 N78-17008
Effect of separation bubbles on the lift of wing profiles
p0205 N78-17012
Unsteady pressure distribution measurements at two trapezoidal wings with unit aspect ratio
p0205 N78-17020
Application and comparison of modal perturbation methods and modal correction procedures exemplified by a swept wing with two external stores
[DLR-FB-77-21] p0238 N78-18014
The influence of jets of cooling air exhausted from the trailing edges of a supercritical turbine cascade on the aerodynamic data
p0322 N78-21148
Calculation of unsteady airloads on oscillating three-dimensional wings and bodies
p0346 N78-22038
Two-dimensional viscous-flow past an airfoil in an unsteady airstream
p0347 N78-22058
Determination of the vortex shedding frequency of cascade with different trailing edge thickness
p0347 N78-22067
Investigations on unsteady pressure distribution measurements in rotating systems
[DLR-FB-77-43] p0566 N78-31135

DEUTSCHE FORSCHUNGS- UND VERSUCHSANSTALT FUER LUFT- UND RAUMFAHRT, OBERPFAFFENHOFEN (WEST GERMANY).
Assess II - A simulated mission of Spacelab
p0569 A78-50276
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-76/3] p0137 N78-14002
Calculation of horizontal tail loads in maneuvering flight
[DLR-IB-536-76/4] p0137 N78-14003
Control law design techniques
[DLR-IB-552-77/15] p0143 N78-14059
The use of pyranometers onboard aircraft
[DLR-FB-77-24] p0145 N78-14379
Test report on the application of the Linde fog removal equipment at the Erding air base
[DLR-IB-75/8] p0145 N78-14763
Some results of tests on the helicopter-tank and tank-helicopter visibility under idealized conditions
[DLR-IB-553-75/9] p0146 N78-14895
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
Calculation of the horizontal tail loads from elevator actuation
[DLR-IB-536-76/4] p0238 N78-18011
Supporting investigations during testing of the WDL-1 airship in Ghana and Upper Volta
[DLR-IB-536-77/1] p0238 N78-18012
Optimal level controls of high performance aircraft
[DLR-IB-552-77/20] p0243 N78-18059
The geometrical theory of diffraction - a method for the solution of electromagnetic boundary value problems of complicated structures in the high frequency case
p0248 N78-18290
The integral equation method - a computational method for diffracted and scattered fields of complicated structures
p0248 N78-18291
Control system design using vector-valued performance criteria with application to the control rate reduction in parameter insensitive control systems
[DLR-FB-77-55] p0565 N78-31125

DIREZIONE LABORATORI AERONAUTICA MILITAIRE, ROME (ITALY).
X-ray diffraction: From structural X-ray diffractography to X-ray oscillographic diffractoscopy
p0444 N78-26468

DORNIER-SYSTEM G.M.B.H., FRIEDRICHSHAFEN (WEST GERMANY).
Influence of wing tapering on the development of a three-dimensional turbulent boundary layer exemplified with a transonic wing
[BMVG-FBWT-77-7] p0237 N78-18010
Improvement of flight measuring data with a Kalman filter
[BMVG-FBWT-77-6] p0243 N78-18057
Modern wing technology for general aviation aircraft
[BMFT-FB-W-77-14] p0307 N78-20127
Open loop gust alleviation
[BMFT-FB-W-77-22] p0353 N78-22114

DORNIER-WERKE G.M.B.H., FRIEDRICHSHAFEN (WEST GERMANY).
Tethered RPV-rotorcraft
p0263 N78-19141

Analysis of error sources in predicted flight performance
p0435 N78-26087
Inspection of carbon fibre parts after fabrication and during service
p0444 N78-26476
Advanced control concepts for future fighter aircraft
p0549 N78-30104
DORTMUND UNIV. (WEST GERMANY).
Non-welding joining, cutting and thermal spraying methods
p0046 N78-11395
DOUGLAS AIRCRAFT CO., INC., LONG BEACH, CALIF.
Boron/aluminum skins for the DC-10 aft pylon
p0004 A78-12073
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
NDT of DC-10 graphite-epoxy rudder
p0339 A78-35445
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Cost/benefit tradeoffs for reducing the energy consumption of the commercial air transportation system
[NASA-CR-137925] p0020 N78-10035
Blade fragment energy analysis
p0025 N78-10074
Approaches to rotor fragment protection
p0026 N78-10076
Effect of forward motion on engine noise
[NASA-CR-134954] p0028 N78-10093
Study to develop improved fire resistant aircraft passenger seat materials, phase 1
[NASA-CR-152056] p0036 N78-11042
Characterization of secondary ignition sources in unattended compartments and full-scale baseline test
[NASA-CR-151573] p0094 N78-13028
Study to improve airframe turbine engine rotor blade containment
[AD-A046255] p0142 N78-14049
Noise and sonic fatigue of high lift devices. Aeroacoustic loads
[AD-A045950] p0147 N78-15007
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways, appendixes
[NASA-CR-145281] p0200 N78-16066
Expansion of flight simulator capability for study and solution of aircraft directional control problems on runways
[NASA-CR-2970] p0306 N78-20118
Evaluation of windshield materials subjected to simulated supersonic flight
[AD-A049981] p0317 N78-21101
Aircraft cargo compartment fire test simulation program
[NASA-CR-151951] p0324 N78-21223
Airframe noise of the DC-9-31
[NASA-CR-3027] p0495 N78-28887
Winglet and long duct nacelle aerodynamic development for DC-10 derivatives
p0496 N78-29049
Advanced aerodynamics and active controls for a next generation transport
p0497 N78-29052
Damping, static, dynamic, and impact characteristics of laminated beams typical of windshield construction
[AD-A054463] p0548 N78-30093
Reference aircraft for ICAO Working Group E
[NASA-CR-158929] p0609 N78-32087
Primary Adhesively Bonded Structure Technology (PABST). Phase 1: Detail design
[AD-A056857] p0626 N78-33095
DOUGLAS AIRCRAFT CO., INC., SANTA MONICA, CALIF.
Key issues in application of composites to transport aircraft
p0448 N78-27063
Application of porous materials for laminar flow control
p0449 N78-27072
DOW CHEMICAL CO., WALNUT CREEK, CALIF.
Design, fabrication, and testing of a full-scale breadboard in nitrogen generator for fuel tank inerting application
[AD-A049459] p0317 N78-21097
DRAPER (CHARLES STARK) LAB., INC., CAMBRIDGE, MASS.
Evaluation of the F-8 DFBW analytic redundancy sensor FDI algorithm using telemetry data
[AIAA 77-1506] p0007 A78-12252
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
Development of capability for multifunction integrated reference assembly evaluation
[AD-A044849] p0083 N78-12062
Palefac
[AD-A048331] p0244 N78-18065
Reliable dual-redundant sensor failure detection and identification for the NASA F-8 DFBW aircraft
[NASA-CR-2944] p0309 N78-20141
DUNLAY (WILLIAM J., JR.), BALA CYNWYD, PA.
Airport improvement task force delay study: Delay model validation plan
[AD-A048112] p0211 N78-17077
DYNAMIC CONTROLS, INC., DAYTON, OHIO.
The evaluation of a digital hardware voter/monitor in an aircraft control system
[AD-A043979] p0043 N78-11117
Research and development of aircraft control actuation systems. The development of a direct drive fly-by-wire flight control system and evaluation of a force sharing fly-by-wire actuator
[AD-A047283] p0200 N78-16065
DYNAMICS RESEARCH CORP., WILMINGTON, MASS.
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0114 A78-18464
Digital Avionics Information System (DAIS): Mid-1980's maintenance analysis
[AD-A047886] p0244 N78-18063
DYTEC ENGINEERING, INC., HUNTINGTON BEACH, CALIF.
Investigation of ground reflection and impedance from flyover noise measurements
[NASA-CR-145302] p0251 N78-18874
Atmospheric-absorption adjustment procedure for aircraft flyover noise measurements
[AD-A051700] p0403 N78-24899

E

ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE (SWITZERLAND).
Deposition of fine particles in the opening of film-cooled gas turbine blades
[EPFL-ITA-2] p0408 N78-25091
ELECTROMAGNETIC COMPATIBILITY ANALYSIS CENTER, ANNAPOLIS, MD.
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
The impact of a proposed active BCAS on ATCRBS performance in the Washington, D. C., 1981 environment
[AD-A048589/6] p0303 N78-20099
Interference analysis between TRSB microwave landing system and adjacent C-band radars
[AD-A049882] p0304 N78-20101
Prediction model of ATCRBS transient effects performance
[AD-A049811/3] p0348 N78-22069
FAA remote terminal system
[AD-A054604] p0493 N78-28295
An EMC analysis of the proposed ASDE-3 Airport Surface Detection Equipment radar
[AD-A054607] p0493 N78-28297
ELEKTRONIK-SYSTEM G.M.B.H., MUNICH (WEST GERMANY).
Navigation system aspects of low altitude flight
p0434 N78-26073
ELLIOTT-AUTOMATION SPACE AND ADVANCED MILITARY SYSTEMS LTD., CAMBERLEY (ENGLAND).
Avionics and the MRCA
p0141 N78-14046
ENERGY SYSTEMS CORP., NASHUA, N. H.
Downed Airman Power Source (DAPS) for inclusion into the RSSK-8A aircraft ejection seat to be used by downed pilots for environmental anti-exposure protection
[AD-A044483] p0083 N78-12052
Downed Airman Power Source (DAPS) for inclusion into the RSSK-1A aircraft ejection seat to be used by downed pilots for environmental

anti-exposure protection
[AD-A044481] p0083 N78-12053
ENGINEERING SCIENCES DATA UNIT, LONDON (ENGLAND).
Aerodynamic centre of wing-fuselage-nacelle combinations: Effect of wing-pylon mounted nacelles
[ESDU-77012] p0079 N78-12010
Lost range, fuel and time due to climb and descent: Propeller-driven aeroplanes
[ESDU-77015] p0084 N78-12066
Buckling of struts. Lipped and unlipped Z sections
[ESDU-77030] p0366 N78-23469
ENVIRONMENTAL PROTECTION AGENCY, ANN ARBOR, MICH.
Sources of variability and inaccuracies in aircraft gas turbine emission measurements
[PB-270898/0] p0099 N78-13069
Test procedure analysis and recommendations for supersonic transport aircraft emission measurement
[PB-270864/2] p0102 N78-13634
Aircraft emission factors
[PB-275067/7] p0250 N78-18595
Cost-effectiveness analysis of the proposed revisions in the exhaust emission standards for new and in-use gas turbine aircraft engines based on industry submittals
[PB-276508/9] p0353 N78-22110
Aircraft technology assessment status of the gas turbine program
[PB-277351/3] p0363 N78-23099
ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.
Environmental protection agency aircraft emissions standards
p0038 N78-11064
ENVIRONMENTAL RESEARCH INST. OF MICHIGAN, ANN ARBOR.
Holographic combiners for head-up displays
[AD-A047998] p0244 N78-18064
ENVIRONMENTAL SCIENCES RESEARCH LAB., RESEARCH TRIANGLE PARK, N.C.
Non-extractive electro-optical measurement of jet-engine emissions
[AD-A056783] p0628 N78-33105
EUROPEAN SPACE AGENCY, PARIS (FRANCE).
Wind tunnel study of an active flutter suppression system
p0046 N78-11974
Amplification of distortions in an axial compressor stage
p0046 N78-11983
Two-dimensional model for the formation of vortex sheets shed by the lateral edge of a wing
[ESA-TT-413] p0093 N78-13025
Mean number of loads and accelerations in roll of an aircraft flying in turbulence
p0144 N78-14188
Convection and refraction of acoustic waves in an open wind tunnel flow
p0146 N78-14986
Research on unsteady turbulent boundary layers
p0146 N78-14992
A numerical method for calculating the unsteady aerodynamic pressure distribution on harmonically oscillating wings with control surfaces in subsonic flow. Theory and results for compressible flow, part 2
[ESA-TT-430] p0205 N78-17029
Unsteady pressure measurements on wing-store combinations in incompressible flow
[ESA-TT-426] p0238 N78-18018
Determination of dynamic characteristics from flight test data
[ESA-TT-434] p0246 N78-18081
The use of pyranometers in aircraft
[ESA-TT-433] p0250 N78-18408
Metrology of aircraft overflight noise. Errors due to its nonstationary character
p0358 N78-23038
Boron combustion in combinatory propulsion
[ESA-TT-462] p0365 N78-23258
The geometrical theory of diffraction - A method for the solution of electromagnetic boundary problems of complicated structures in the high frequency case
[ESA-TT-435] p0365 N78-23310
The integral equation method - a computational method for diffracted and scattered fields of complicated structures
[ESA-TT-436] p0365 N78-23311
Numerical calculation of three-dimensional unsteady flows with vortex sheets
p0487 N78-28047
Structural modifications on a swept wing model with two external stores by means of modal perturbation and modal correction methods
[ESA-TT-463] p0488 N78-28064
Theoretical and experimental studies of acoustic propagation in inhomogeneous moving media
[ESA-TT-477] p0556 N78-30909
EUROPEAN SPACE RESEARCH AND TECHNOLOGY CENTER, NOORDWIJK (NETHERLANDS).
Aerosat communication management
p0365 N78-23307
EXXON RESEARCH AND ENGINEERING CO., LINDEN, N. J.
Evaluation of methods to produce aviation turbine fuels from synthetic crude oils, phase 3, volume 3
[AD-A053106] p0410 N78-25239
Alternate fuels nitrogen chemistry
[AD-A053299] p0411 N78-25240

F

FACILITY CHECKING SQUADRON (1866TH) (AFCS), SCOTT AFB, ILL.
TRACALS evaluation report. Communications station evaluation report, Little Rock AFB, Arkansas
[AD-A053938] p0452 N78-27106
TRACALS evaluation report. TACAN, VOR, and ILS station evaluation report, Andersen AFB, Guam
[AD-A054244] p0546 N78-30078
FEDERAL AVIATION ADMINISTRATION, ATLANTIC CITY, N.J.
The analysis of National Transportation Safety Board large fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A048354] p0239 N78-18021
FEDERAL AVIATION ADMINISTRATION, MOFFETT FIELD, CALIF.
Certification study of a derivative model of a small jet transport airplane using a piloted research simulator
[AD-A046442] p0140 N78-14033
FEDERAL AVIATION ADMINISTRATION, WASHINGTON, D. C.
Federal Aviation Administration's approach to engine rotor integrity
p0025 N78-10069
Field compaction of bituminous mixes for airport pavements
[AD-A041335/1] p0043 N78-11120
A preliminary evaluation of the ATCRBS signal format for the BCAS data link
[AD-A046164] p0139 N78-14023
Terminal area forecast 1978-1988
[AD-A046543] p0195 N78-16027
Remoteness-compensation methodology for benefit/cost establishment and discontinuance criteria
[AD-A043836] p0201 N78-16074
Establishment of new major public airports in the United States
[AD-A046462] p0201 N78-16075
A synopsis of the weather problems facing today's general aviation pilots
p0268 N78-19718
Establishment criteria for Visual Approach Slope Indicator (VASI)
[AD-A043785] p0354 N78-22117
Airport activity statistics of certificated route air carriers
[AD-A052728] p0395 N78-24102
Discrete Address Beacon System (DABS) Development Test and Evaluation (DT and E) program
[AD-A052363] p0439 N78-26123
Airport Surface Detection Equipment (ASDE-3) project plan
[AD-A052362] p0457 N78-27144
Calculations of maximum A-weighted sound levels dBA
p0460 N78-27872
Engineering and development program plan: Wake vortex
[AD-A051143] p0546 N78-30071
IFR aircraft handled forecast by air route traffic control center, fiscal years 1978-1989
[AD-A049305] p0559 N78-31075

Helicopter external noise requirements: FAA perspective
p0618 N78-32817
The FAA concept for a Beacon Collision Avoidance System (BCAS). Volume 1: Executive summary
[AD-A056930] p0625 N78-33072
Engineering and development program plan: Discrete Address Beacon System (DABS)
[AD-A057122] p0625 N78-33073
Engineering and development program plan: Advanced Integrated Flight Systems (AIFS)
[AD-A056770] p0630 N78-33119
FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D. C.
Federal policy options to effect fuel conservation in the air industry
p0250 N78-18548
FERRANTI LTD., EDINBURGH (SCOTLAND).
Navigation, guidance and control for high performance military aircraft
p0316 N78-21090
FIAT RESEARCH CENTER, OBBASSANO (ITALY).
Application of small-angle neutron scattering to NDI of materials and manufactured components
p0443 N78-26465
Surface corrosion evaluation by relative magnetic susceptibility measurements
p0443 N78-26466
FIBER SCIENCE, INC., GARDENA, CALIF.
Filament-winding fabrication of QCSEE configuration fan blades
[NASA-CR-135332] p0198 N78-16052
Composite hub/metal blade compressor rotor
[NASA-CR-135343] p0247 N78-18131
FLORIDA UNIV., EGLIN AFB.
Studies on the failure of stiffened cylindrical shells subjected to dynamic loads
[AD-A053954] p0459 N78-27457
FLORIDA UNIV., GAINESVILLE.
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
FORD MOTOR CO., DEARBORN, MICH.
Brittle materials design, high temperature gas turbine. Volume 1: Ceramic component fabrication and demonstration
[AD-A055252] p0611 N78-32099
Brittle materials design, high temperature gas turbine. Volume 2: Ceramic turbine rotor technology
[AD-A055276] p0611 N78-32100
FWG ASSOCIATES, INC., TULLAHOMA, TENN.
Investigations of simulated aircraft flight through thunderstorm outflows
[NASA-CR-3052] p0603 N78-32037

G

GATES LEARJET CORP., WICHITA, KANS.
Conceptual design of single turbofan engine powered light aircraft
[NASA-CR-151972] p0197 N78-16045
GELLMAN RESEARCH ASSOCIATES, INC., JENKINTOWN, PA.
The role of engineering in the flight equipment purchasing process
[NASA-CR-156839] p0213 N78-17915
GENERAL ACCOUNTING OFFICE, WASHINGTON, D. C.
Noise pollution: Federal program to control it has been slow and ineffective. Environmental Protection Agency. Department of Transportation
[PB-268690/5] p0032 N78-10624
Effective fuel conservation programs could save millions of gallons of aviation fuel
[PB-271249/5] p0091 N78-12552
Can the Army's $2.8 billion program modernize the CH-47 helicopter be improved
[PB-277397/6] p0440 N78-26139
Status of the Navy's vertical short takeoff and landing aircraft
[PB-277401/6] p0440 N78-26140
Is production of the CH-53E helicopter warranted
[PB-278815/6] p0453 N78-27116
Status of the Air Force's F-16 aircraft program
[PB-280304/7] p0567 N78-31946
GENERAL APPLIED SCIENCE LABS., INC., WESTBURY, N. Y.
The effect of cycle variables on the emissions and performance of lean premixed gas turbine primary zone combustor
[AIAA PAPER 78-1039] p0465 A78-43567
Development of a catalytic combustor fuel/air carburetion system
[AD-A044063] p0088 N78-12093
Experimental study of the effect of cycle pressure on lean combustion emissions
[NASA-CR-3032] p0492 N78-28098
GENERAL DYNAMICS/CONVAIR, SAN DIEGO, CALIF.
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
Weapon system costing methodology improved structural cost analysis
[AD-A044037] p0024 N78-10059
F-106 scheduled maintenance study. Phase 3: Predictions and recommendations
[AD-A045399] p0091 N78-13000
F-106 scheduled maintenance study. User's manual
[AD-A045625] p0091 N78-13001
F-106 scheduled maintenance improvement summary
[AD-A045400] p0092 N78-13002
Calculations of some unsteady transonic flows about the NACA 64A006 and 64A010 airfoils
[AD-A046178] p0137 N78-13999
Development of thermoplastic composite aircraft structural elements
[AD-A048468] p0258 N78-19097
GENERAL DYNAMICS/FORT WORTH, TEX.
F-16 flutter model studies with external wing stores
p0117 A78-18801
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
Remarks on future computational aerodynamics requirements
p0269 N78-19785
Correlation of F-16 aerodynamics and performance predictions with early flight test results
p0436 N78-26092
An investigation of wing buffeting response at subsonic and transonic speeds: Phase 1: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152109] p0629 N78-33113
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152110] p0629 N78-33114
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 1: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152111] p0629 N78-33115
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 1: Summary of technical approach, results and conclusions
[NASA-CR-152112] p0629 N78-33116
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 2: Plotted power spectra
[NASA-CR-152113] p0629 N78-33117
An investigation of wing buffeting response at subsonic and transonic speeds. Phase 2: F-111A flight data analysis. Volume 3: Tabulated power spectra
[NASA-CR-152114] p0629 N78-33118
GENERAL ELECTRIC CO., CINCINNATI, OHIO.
Sound separation probes for flowing duct noise measurements
p0106 A78-17396
Failure detection and correction for turbofan engines
p0184 A78-23918
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
Materials and manufacturing processes for increased life/reliability
p0027 N78-10086

High velocity jet noise source location and reduction. Task 1: Activation of facilities and validation of source location techniques
[AD-A041848] p0028 N78-10100
Compressor blade manufacture by electrochemical machining. Advanced turbine engine gas generator
[AD-A043742] p0030 N78-10110
High velocity jet noise source location and reduction. Task 1 supplement: Certification of the General Electric jet noise anechoic test facility
[AD-A042327/7] p0031 N78-10119
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
Cost benefit study of advanced materials technology for aircraft turbine engines
[NASA-CR-135235] p0041 N78-11081
Augmentor emissions reduction technology program
[NASA-CR-135215] p0097 N78-13057
Advanced supersonic propulsion study, phases 3 and 4
[NASA-CR-135236] p0097 N78-13058
Development of emissions measurement techniques for afterburning turbine engines, supplement 1
[AD-A045491] p0098 N78-13066
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
GE core engine noise investigation, low emission engines
[AD-A048590] p0245 N78-18069
Evaluation of the in-flight noise signature of a 32-chute suppressor nozzle: Acoustic data report
[NASA-CR-152076] p0271 N78-19899
QCSEE task 2: Engine and installation preliminary design
[NASA-CR-134738] p0361 N78-23089
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
Acoustic tests of duct-burning turbofan jet noise simulation
[NASA-CR-2966] p0487 N78-28043
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 1: Model scale data
[NASA-CR-135239-VOL-1-SECT-1] p0491 N78-28094
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 2: Full size data
[NASA-CR-135239-VOL-1-SECT-2] p0491 N78-28095
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 1, section 3: Data plots
[NASA-CR-135239-VOL-1-SECT-3] p0491 N78-28096
Acoustic tests of duct-burning turbofan jet noise simulation: Comprehensive data report. Volume 2: Model design and aerodynamic test results
[NASA-CR-135239-VOL-2] p0492 N78-28097
Core compressor exit stage study. Volume 1: Blading design
[NASA-CR-135391] p0501 N78-29099
Long-term CF6 engine performance deterioration: Evaluation of engine S/N 451-380
[NASA-CR-159390] p0501 N78-29103
Design of impact-resistant boron/aluminum large fan blade
[NASA-CR-135417] p0501 N78-29104
Energy efficient engine: Preliminary design and integration studies
[NASA-CR-135444] p0563 N78-31108
Aircraft gas turbine low-power emissions reduction technology program
[NASA-CR-135434] p0611 N78-32097
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101
Blade row dynamic digital compression program. Volume 2: J85 circumferential distortion redistribution model, effect of Stator characteristics, and stage characteristics sensitivity study
[NASA-CR-134953] p0627 N78-33103
Evaluation of cyclic behavior of aircraft turbine disk alloys
[NASA-CR-159433] p0633 N78-33478

GENERAL ELECTRIC CO., CLEVELAND, OHIO.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
GENERAL ELECTRIC CO., DAYTONA BEACH, FLA.
Wide-angle, multiviewer infinity display design
[AD-A051158] p0364 N78-23108
GENERAL ELECTRIC CO., EVENDALE, OHIO.
Effects of film injection on performance of a cooled turbine
p0216 A78-24902
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Effects of film injection on performance of a cooled turbine
p0322 N78-21147
GENERAL ELECTRIC CO., FAIRFIELD, CONN.
CF6 jet engine performance deterioration results
p0446 N78-27049
CF6 performance improvement
p0447 N78-27051
Energy efficient engine preliminary design and integration studies
p0447 N78-27054
GENERAL ELECTRIC CO., LYNN, MASS.
Development of hot isostatically pressed Rene 95 turbine parts
[AD-A043688] p0029 N78-10109
Turbine tip clearance measurement
[AD-A055765] p0564 N78-31115
GENERAL ELECTRIC CO., PHILADELPHIA, PA.
Status of the NASA/General Electric experimental clean combustor program, phase 3
p0039 N78-11066
Inlet/nacelle/exhaust system integration for the QCSEE propulsion systems
p0392 N78-24068
Acoustics and aerodynamics of over-the-wing thrust reversers
p0392 N78-24071
GENERAL ELECTRIC CO., PITTSFIELD, MASS.
Lightning protection of aircraft
[NASA-RP-1008] p0035 N78-11024
The lightning environment
p0035 N78-11025
Aircraft lightning attachment phenomena
p0035 N78-11026
Lightning strike experience
p0035 N78-11027
Lightning effects on aircraft
p0035 N78-11028
Direct effects protection
p0035 N78-11029
Fuel system protection
p0035 N78-11030
Structures protection
p0035 N78-11031
Voltages and currents induced by lightning
p0035 N78-11032
The external magnetic field environment
p0036 N78-11033
The internal magnetic fields created by diffusion
p0036 N78-11034
The internal fields coupled through apertures
p0036 N78-11035
Voltages and currents induced on wiring
p0036 N78-11036
Effects of shields on cables
p0036 N78-11037
Examples of induced voltages measured on aircraft
p0036 N78-11038
Design to minimize indirect effects
p0036 N78-11039
Component damage analysis
p0036 N78-11040
Test techniques for evaluation of indirect effects
p0036 N78-11041
GENERAL ELECTRIC CO., SCHENECTADY, N. Y.
Failure detection and correction for turbofan engines
p0184 A78-23918
Aero-acoustic experimental verification of optimum configuration of variable-pitch fans for 40 x 80 foot subsonic wind tunnel
[NASA-CR-152040] p0030 N78-10115
Unsteady blade rows in high-speed flow
[AD-A055620] p0615 N78-32391
GENERAL MOTORS CORP., INDIANAPOLIS, IND.
DSTR/501-M62B dynamic interface critical speed

problem
[AD-A042441] p0042 N78-11108
The effect of rotor-stator axial spacing on the time-variant aerodynamic response of a compressor stator
[AD-A050648] p0352 N78-22106
GEORGE WASHINGTON UNIV., WASHINGTON, D. C.
A maintenance model for k-out-of-n subsystems aboard a fleet of advanced commercial aircraft
[NASA-CR-145272] p0345 N78-22020
Bounds on thickness and loading noise of rotating blades and the favorable effect of blade sweep on noise reduction
p0621 N78-32834
Annoyance due to the interaction of community noise sources
p0634 N78-33613
GEORGIA INST. OF TECH., ATLANTA.
An analysis of the flutter and damping characteristics of helicopter rotors
p0030 N78-10111
A numerical study of viscous flows around airfoils
[AD-A046084] p0137 N78-14001
A theory of the supersonic turbulent axisymmetric near wake behind bluff-base bodies
p0146 N78-14995
An improved method of calculating the tip vortex geometry for hovering rotors
p0193 N78-15997
Drag on an oscillating airfoil in a fluctuating free stream
p0203 N78-16994
A numerical study of incompressible viscous flow around airfoils
p0203 N78-16996
Prospects for computational aerodynamics
p0270 N78-19795
A numerical study of unsteady viscous flows around airfoils
p0347 N78-22056
Numerical study of laminar unsteady flow over airfoils
p0358 N78-23049
Pressure measurements near the tip of a hovering model rotor blade and a preliminary investigation of the flow in the rotor wake
p0358 N78-23050
Aircraft noise propagation
p0445 N78-26879
Noise suppression in jet inlets
[AD-A054173] p0502 N78-29107
GORDIAN ASSOCIATES, INC., NEW YORK.
Computer model for refinery operations with emphasis on jet fuel production. Volume 2: Data and technical bases
[NASA-CR-135334] p0266 N78-19326
Computer model for refinery operations with emphasis on jet fuel production. Volume 3: Detailed systems and programming documentation
[NASA-CR-135335] p0410 N78-25235
GORHAM ASSOCIATES, THOUSAND OAKS, CALIF.
Study to determine operational and performance criteria for STOL aircraft operating in low visibility conditions
[NASA-CR-152164] p0490 N78-28083
GRONINGEN RIJKSUNIVERSITEIT (NETHERLANDS).
Assess II - A simulated mission of Spacelab
p0569 A78-50276
GRUMMAN AEROSPACE CORP., BETHPAGE, N.Y.
Computational transonic flow about realistic aircraft configurations
[AIAA PAPER 78-104] p0172 A78-22576
An analysis of the inviscid transonic flow over two-element airfoil systems
[AD-A043460] p0033 N78-11011
Advanced joining techniques in aerospace cell structures
p0045 N78-11392
Investigation of VTOL upwash flows formed by two impinging jets
[AD-A047805] p0205 N78-17025
Flight qualification of titanium F-14A airframe components manufactured by Hot Isostatic Pressing (HIP)
[AD-A048485] p0242 N78-18055
V/STOL hover stability impact on hover control task
p0258 N78-19102
Demonstration of acoustic emission system for damage monitoring of full scale metallic aircraft structures during fatigue testing
[AD-A053108] p0408 N78-25085
An automated procedure for computing the three-dimensional transonic flow over wing-body combinations, including viscous effects. Volume 1: Description of analysis methods and applications
[AD-A055899] p0558 N78-31052
Ground impingement of a fan jet exhaust plume
[AD-A054832] p0563 N78-31112
Large scale static tests of a tilt-nacelle V/STOL propulsion/attitude control system
[NASA-CR-152181] p0611 N78-32098
GULF AND WESTERN APPLIED SCIENCE LABS., WALTHAM, MASS.
Sensory mechanism modeling
[AD-A049278] p0266 N78-19170
GUSTINCIC (J. J.) CONSULTING ENGINEER, MARINA DEL REY, CALIF.
An aircraft radiometer front end, addendum
[NASA-CR-157777] p0633 N78-33405

H

HAMILTON STANDARD, WINDSOR LOCKS, CONN.
Prop-fan data support study
[NASA-CR-152141] p0455 N78-27128
Aerodynamic design and performance testing of an advanced 30 deg swept, eight bladed propeller at Mach numbers from 0.2 to 0.85
[NASA-CR-3047] p0606 N78-32066
The importance of quadrupole sources in prediction of transonic tip speed propeller noise
p0620 N78-32833
HAWKER SIDDELEY AVIATION LTD., KINGSTON UPON THAMES (ENGLAND).
VTOL performance estimation for jet lift aircraft
p0435 N78-26082
Metal technology for future aircraft design
p0550 N78-30115
HEBREW UNIV., JERUSALEM (ISRAEL).
The dynamics of non spherical particles
[AD-A047144] p0256 N78-19080
HELICOPTER ASSOCIATION OF AMERICA, WASHINGTON, D. C.
Helicopter noise regulations: An industry perspective
p0618 N78-32818
HINDUSTAN AERONAUTICS LTD., BANGALORE (INDIA).
Multi-variate optimization problems of flight vehicle synthesis
[PB-276123/7] p0318 N78-21103
HONEYWELL, INC., HOPKINS, MINN.
Hydraulic constant recoil program
[AD-A049313] p0267 N78-19517
HONEYWELL, INC., MINNEAPOLIS, MINN.
Adaptive control laws for F-8 flight test
p0013 A78-12358
Electronics plus fluidics for V/STOL flight control
p0260 N78-19114
HUGHES AIRCRAFT CO., CULVER CITY, CALIF.
Simultaneous sensor-presentation techniques study
[AD-A043355] p0024 N78-10066
Capacitors for aircraft high power
[AD-A046340] p0151 N78-15052
Development of a programmable panel
[AD-A048469] p0258 N78-19098
HUGHES AIRCRAFT CO., FULLERTON, CALIF.
High resolution, high brightness color television projector: Analysis, investigations, design, performance of baseline projector
[AD-A049279] p0267 N78-19362
Portable earth station antenna study system
[AD-A054791] p0614 N78-32321
HUGHES HELICOPTERS, CULVER CITY, CALIF.
OH-6A tail rotor transmission grease evaluation and fail detection system test
[AD-A044635] p0085 N78-12072
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 1: Materials, design and test
[AD-A046176] p0140 N78-14037
Flight test of a composite multi-tubular spar main rotor blade on the AH-1G helicopter. Volume 2: Cost estimates and process

specifications
[AD-A046279] p0149 N78-15032
Liquid crystal airborne display
[AD-A048198] p0243 N78-18062
Advanced technology helicopter landing gear
[AD-A048891] p0261 N78-19124
Combined military and commercial application of light helicopters
p0262 N78-19136
Evaluation of a circulation control tail boom for yaw control
[AD-A055116] p0564 N78-31119
Dynamic analysis using superelements for a large helicopter model
p0617 N78-32486
The impact of urban operations on helicopter noise requirements
p0619 N78-32820
HUMAN ENGINEERING LABS., ABERDEEN PROVING GROUND, MD.
Computing internal cockpit reflections of external point light sources for the model YAH-64 advanced attack helicopter low glare canopy design
[AD-A043367] p0032 N78-10873
The effects of eliminating minor graduations on dial reading performance
[AD-A046709] p0150 N78-15039
A review of the literature on electro-optical flight displays
[AD-A053310] p0440 N78-26141
HUMAN RESOURCES RESEARCH ORGANIZATION, ALEXANDRIA, VA.
Some current problems in simulator design, testing and use
[AD-A043240] p0044 N78-11127
Some factors influencing Air Force simulator training effectiveness
[AD-A043239] p0044 N78-11128
HYDRAULIC RESEARCH AND MFG. CO., VALENCIA, CALIF.
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
HYDRONAUTICS, INC., LAUREL, MD.
Measurements and analysis of the forces acting on a small aircraft flying in the upwash of a large aircraft
[AD-A055286] p0558 N78-31048

I

IBM FEDERAL SYSTEMS DIV., OWEGO, N. Y.
Standard modular power supplies for avionics
[AD-A057159] p0627 N78-33100
IBM RESEARCH LAB., SAN JOSE, CALIF.
Multiprocessing tradeoffs and the wind-tunnel simulation problem
p0270 N78-19805
IIT RESEARCH INST., ANNAPOLIS, MD.
EMC analysis of the proposed AEROSAT VHF subsystem with current inband communications systems. Volume 2: Worldwide
[AD-A043904] p0090 N78-12281
Computer simulations of ATCRBS processing equipment for use with the aims and transient effects performance prediction models
[AD-A046758] p0139 N78-14025
Automated UHF frequency assignment system for FAA air traffic control communications
[AD-A047847] p0205 N78-17034
Proposed methods and criteria for ATCRBS PRF assignment
[AD-A050050/4] p0360 N78-23074
IIT RESEARCH INST., CHICAGO, ILL.
Determination of the principal mechanical properties of reinforced plastic laminates for aircraft
[AD-A043350] p0044 N78-11201
Turbine engine particulate emission characterization, phase 2
[AD-A057370] p0628 N78-33106
ILLINOIS INST. OF TECH., CHICAGO.
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
An experimental investigation of oscillating flows over an airfoil
p0299 N78-20058
Features of unsteady flows over airfoils
p0346 N78-22054
ILLINOIS UNIV. AT URBANA-CHAMPAIGN, URBANA.
Baseline data requirements for assessing environmental impact
[PB-281148/7] p0617 N78-32620
ILLINOIS UNIV., URBANA.
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
A distribution model for the aerial application of granular agricultural particles
[NASA-CR-157745] p0622 N78-33048
ILLINOIS UNIV., URBANA-CHAMPAIGN.
On some structure-turbulence interaction problems
p0193 N78-15996
Design of propellers for minimum noise
p0351 N78-22094
Avionics performance analysis: A historical review and a current assessment of flight instrumentation and control systems in civil aviation
[NASA-CR-145378] p0610 N78-32094
IMPERIAL COLL. OF SCIENCE AND TECHNOLOGY, LONDON (ENGLAND).
Engineering calculation methods for turbulent flow, volume 1
[IC-AERO-77-102-VOL-1] p0302 N78-20091
Engineering calculation methods for turbulent flow, volume 2
[IC-AERO-77-102-VOL-2] p0302 N78-20092
Engineering calculation methods for turbulent flow, volume 3
[IC-AERO-77-102-VOL-3] p0303 N78-20093
Structure of turbulence in complex flows
p0494 N78-28407
INDIAN INST. OF SCIENCE, BANGALORE.
Rocket structures
p0612 N78-32123
Hypersonic flows
p0613 N78-32124
INDIAN INST. OF TECH., BOMBAY.
Optimal autostabilizer for a supersonic fighter aircraft
p0441 N78-26150
INDUSTRIEANLAGEN-BETRIEBSGESELLSCHAFT M.B.H., OTTOBRUNN (WEST GERMANY).
Calculation methods for fatigue life and crack propagation
p0241 N78-18049
Tests on details and components
p0242 N78-18050
NDI methods on full-scale fatigue tests and their service usage
p0444 N78-26471
The influences of residual stresses on oscillating tensile strength and the measurement of residual stress, with emphasis on aircraft construction
[BMVG-FBWT-77-23] p0555 N78-30603
INSTITUT DE MECANIQUE DES FLUIDES DE MARSEILLE (FRANCE).
The dynamic flow on a wing profile in the movement of a screen. The influence of oscillation parameters
p0347 N78-22061
INSTITUTE FOR ADVANCED COMPUTATION, SUNNYVALE, CALIF.
Specialized computer architectures for computational aerodynamics
p0270 N78-19814
INSTITUTE FOR DEFENSE ANALYSES, ARLINGTON, VA.
On setting avionic subsystem unit production cost goals
[AD-A051337] p0398 N78-24133
Cost-effectiveness of flight simulators for military training. Volume 1: Use and effectiveness of flight simulators
[AD-A052801] p0400 N78-24156
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 2: Appendixes
[AD-A053486] p0491 N78-28093
The feasibility of estimating avionics support costs early in the acquisition cycle. Volume 1: The basic report

[AD-A054016] p0550 N78-30119
INSTITUTE FOR TELECOMMUNICATION SCIENCES, BOULDER, COLO.
Objective measurement of voice channel intelligibility
[AD-A048611] p0248 N78-18264
Applications guide for propagation and interference analysis computer programs (0.1 to 20 GHz)
[AD-A053242] p0458 N78-27314
INSTRUMENT FLIGHT CENTER, RANDOLPH AFB, TEX.
Three-cue helicopter flight director evaluation
[AD-A046261] p0143 N78-14058
INTERMETRICS, INC., CAMBRIDGE, MASS.
Comparison of three vertical channel designs for an integrated GPS/inertial navigation system
[AD-A053594] p0490 N78-28079
IOWA STATE UNIV. OF SCIENCE AND TECHNOLOGY, AMES.
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
A study of test section configuration for shock tube testing of transonic airfoils
[NASA-CR-157237] p0442 N78-26153
Trajectory optimization for some sailplane performance problems
p0560 N78-31083
Analysis of multistage, axial flow turbomachine wake production, transport, and interaction
[AD-A055754] p0564 N78-31118
Blade-surface boundary layer and wake computational models for estimation of axial-flow compressor and fan blade-row turning angles and losses
p0603 N78-32038
IOWA UNIV., IOWA CITY.
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
ISRAEL AIRCRAFT INDUSTRIES LTD., LOD.
Analytical and experimental fatigue program for the Kfir main and nose landing gears
p0411 N78-25455

J

JAMES AND ASSOCIATES, LANCASTER, CALIF.
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055
JET PROPULSION LAB., CALIF. INST. OF TECH., PASADENA.
Measurements of noise produced by flow past lifting surfaces
[AIAA PAPER 78-239] p0161 A78-20762
Differential altimetry for satellite orbit determination
p0289 A78-31915
Influence of internally generated pure tones on the broadband noise radiated from a jet
p0335 A78-34658
Pressure pulsations on a flat plate normal to an underexpanded supersonic jet
p0377 A78-37743
Resolution enhanced sound detecting apparatus
[NASA-CASE-NPO-14134-1] p0271 N78-19898
Performance evaluation of a catalytic partial oxidation hydrogen generator using turbine engine fuels
[AD-A047355] p0401 N78-24380
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391
Analysis of a suspension system for a wheel rolling on a flat track
[NASA-CR-157563] p0555 N78-30583
An aircraft radiometer front end, addendum
[NASA-CR-157777] p0633 N78-33405
JOINT INST. FOR ACOUSTICS AND FLIGHT SCIENCES, HAMPTON, VA.
Aircraft parameter estimation in frequency domain
[AIAA 78-1344] p0483 A78-46541
Overview of powered-lift technology
p0389 N78-24047
JOINT PUBLICATIONS RESEARCH SERVICE, ARLINGTON, VA.
Some pressing problems of setting physiological-hygienic standards for noise in aerospace medicine
p0618 N78-32673
Translations on USSR science and technology: Physical science and technology, no. 42
[JPRS-71612] p0621 N78-33015
Earth-to-orbital station radio bridge
p0621 N78-33019
Translations on USSR science and technology: Physical science and technology, no. 44
[JPRS-71659] p0621 N78-33024

K

KAMAN AEROSPACE CORP., BLOOMFIELD, CONN.
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 1: Summary report
[AD-A051318] p0396 N78-24118
Advanced development of a helicopter rotor isolation system for improved reliability. Volume 2: Detailed report
[AD-A051319] p0396 N78-24119
Theoretical study of multicyclic control of a controllable twist rotor
[NASA-CR-151959] p0625 N78-33085
KAMAN AVIDYNE, BURLINGTON, MASS.
Correlation study of the UH-18 helicopter blast test results from the DICE-THROW event
[AD-A050463] p0307 N78-20122
Modeling of the UH-1B tail boom for analysis by the NASTRAN computer program
[AD-A052303] p0407 N78-25081
Measurements of blast pressures on a rigid 65 deg sweptback wing at Mach 0.76 from rocket propelled sled tests. Volume 1: Test documentation
[AD-A053468] p0490 N78-28085
Analytical predictions and correlation with experiments for thermal/blast exposure of aircraft panels
[AD-A053389] p0494 N78-28484
KANSAS UNIV., KANSAS CITY.
Flight evaluation of an advanced technology light twin-engine airplane (ATLIT)
p0084 N78-12065
KANSAS UNIV., LAWRENCE.
Some sound transmission loss characteristics of typical general aviation structural materials
[AIAA PAPER 78-1480] p0514 A78-47925
Structural analysis of ultra-high speed aircraft structural components
[NASA-CR-155334] p0101 N78-13476
Flight evaluation of a spoiler roll control system on a light twin-engine airplane
[NASA-CR-2935] p0152 N78-15055
An analytical model for the study of highly separated flow on low speed airfoils
p0203 N78-16995
An investigation of lightning damage to nonmetallic composite aircraft materials and associated protective systems
p0212 N78-17292
A theroretical investigation of the aerodynamics of low aspect-ratio wings with partial leading-edge separation
p0449 N78-27075
A research program to reduce interior noise in general aviation airplanes: Noise reduction through a cavity-backed flexible plate
[NASA-CR-157588] p0567 N78-31873
KANSAS UNIV. CENTER FOR RESEARCH, INC., LAWRENCE.
Minimum induced drag configurations with jet interaction
[NASA-CR-145344] p0204 N78-17002
A theoretical investigation of the aerodynamics of low-aspect-ratio wings with partial leading-edge separation
[NASA-CR-145304] p0235 N78-17993

A study of low-cost reliable actuators for light aircraft. Part A: Chapters 1-8
[NASA-CR-156142] p0305 N78-20110
A study of low-cost reliable actuators for light aircraft. Part B: Appendices
[NASA-CR-156143] p0305 N78-20111
Experimental and finite element investigation of the buckling characteristics of a beaded skin panel for a hypersonic aircraft
[NASA-CR-144863] p0310 N78-20534
A study of commuter airplane design optimization
[NASA-CR-157210] p0406 N78-25078
A theoretical investigation of ground effects on USB configurations
[NASA-CR-157355] p0499 N78-29086
A research program to reduce interior noise in general aviation airplanes: Investigation of the characteristics of an acoustic panel test facility
[NASA-CR-157587] p0567 N78-31874
An investigation of drag reduction for tractor trailer vehicles
[NASA-CR-144877] p0633 N78-33444

KEARNEY (A. T.) AND CO., INC., CHICAGO, ILL.
The Mission Trade-Off Methodology (MTOM) model. Model description
[AD-A049318] p0261 N78-19125

KLM NORTH SEA HELICOPTERS, AMSTERDAM (NETHERLANDS).
Some aspects of offshore operations in the Netherlands
p0262 N78-19135

L

LABORATOIRE CENTRAL AEROSPATIALE, SURESNES CEDEX (FRANCE).
The present status and evolution of the inspection of carbon composite aircraft structures in France
p0444 N78-26478

LABORATORIUM FUER BETRIEBSFESTIGKEIT, DARMSTADT (WEST GERMANY).
Review of investigations on aeronautical fatigue in the Federal Republic of Germany, May 1975 - April 1977
[LBF-S-133] p0046 N78-11426

LAKE CHARLES-MCNEESE URBAN OBSERVATORY, LA.
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096

LANCHESTER POLYTECHNIC, COVENTRY (ENGLAND).
Application of X-ray diffraction stress measuring techniques
p0443 N78-26467

LEAGUE OF CITIES - CONFERENCE OF MAYORS, INC., WASHINGTON, D. C.
An air passenger and air freight service study for the Lake Charles Municipal Airport Authority
[PB-278857/8] p0451 N78-27096

LEAR SIEGLER, INC., GRAND RAPIDS, MICH.
A multi-sensor implementation for navigation, position location, position update, reconnaissance, and weapon delivery: AN/ARN-101(V)
p0315 N78-21082

LEEDS UNIV. (ENGLAND).
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683

LEHIGH UNIV., BETHLEHEM, PA.
Aircraft model prototypes which have specified handling-quality time histories
[NASA-CR-143848] p0142 N78-14054
Load and environment interactions in fatigue crack growth under spectrum loading
[AD-A053904] p0459 N78-27455

LIMBACH-MOTORENBAU, KOENIGSWINTER (WEST GERMANY).
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108

LINCOLN LAB., MASS. INST. OF TECH., LEXINGTON.
DABS coverage
[AD-A045940] p0139 N78-14022
Development of a Discrete Address Beacon System
[AD-A046580] p0139 N78-14029
L-band air-to-air multipath measurements
[AD-A045941] p0144 N78-14212
Proposed technical characteristics for the Discrete Address Beacon System (DABS)
[AD-A048246] p0206 N78-17035
Development of a discrete address beacon system
[AD-A048247] p0206 N78-17036
Uplink coverage measurements in the Los Angeles area for passive BCAS
[AD-A048288] p0239 N78-18027
A hardware implementation of the ATCRBS reply processor used in DABS
[AD-A047622/6] p0257 N78-19090
Verification of DABS sensor surveillance performance (ATCRBS mode) at typical ASR sites throughout CONUS
[AD-A051128] p0395 N78-24105
IPC design validation and flight testing
[AD-A055529] p0559 N78-31074

LITTON SYSTEMS, INC., WOODLAND HILLS, CALIF.
Flight-control/navigation inertial reference system
p0065 A78-15642
Strapdown system redundancy management flight demonstration
[NASA-CR-145356] p0608 N78-32079

LIVERPOOL UNIV. (ENGLAND).
Calculations of the effects of blowing from the leading edges of a cambered delta wing
[ARC-R/M-3800] p0545 N78-30064

LOCKHEED AIRCRAFT CORP., BURBANK, CALIF.
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548

LOCKHEED-CALIFORNIA CO., BURBANK.
Designing the L-1011 to minimize rotor failures effects
p0026 N78-10075
Substructure coupling: A different approach
p0091 N78-12455
Real-time testing of titanium sheet and extrusion coupon specimens subjected to Mach 2.7 supersonic cruise aircraft wing stresses and temperatures
[NASA-CR-2754] p0101 N78-13478
A generalized vortex lattice method for subsonic and supersonic flow applications
[NASA-CR-2865] p0194 N78-16002
Rotorcraft linear simulation model. Volume 1: Engineering documentation
[NASA-CR-152079-VOL-1] p0308 N78-20136
Rotorcraft linear simulation model. Volume 2: Computer implementation
[NASA-CR-152079-VOL-2] p0309 N78-20137
Rotorcraft linear simulation model. Volume 3: User's manual
[NASA-CR-152079-VOL-3] p0309 N78-20138
Fuel conservation merits of advanced turboprop transport aircraft
[NASA-CR-152096] p0316 N78-21095
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[NASA-CR-145326] p0354 N78-22161
Flight service evaluation of an advanced composite empennage component on commercial transport aircraft. Phase 1: Engineering development
[NASA-CR-144986] p0360 N78-23080
Formulas for takeoff performance P3-A, B and C airplanes
[AD-A052354] p0396 N78-24124
Correlation of wind-tunnel and flight-test data for the Lockheed L-1011 Tristar airplane
p0436 N78-26094
Development of advanced composite structures
p0448 N78-27062
Full scale crash test experiment verification of a method of analysis for general aviation structural crashworthiness
[AD-A054154] p0490 N78-28082
General aviation airplane structural crashworthiness user's manual. Volume 2: Input-output, techniques and applications
[AD-A054317] p0499 N78-29084
General aviation airplane structural crashworthiness user's manual. Volume 3: Related design information
[AD-A054266] p0499 N78-29085
Fracture mechanics for structural adhesive bonds
[AD-A054023] p0504 N78-29509
REXOR 2 rotorcraft simulation model. Volume 1: Engineering documentation

[NASA-CR-145331] p0543 N78-30042
REXOR 2 rotorcraft simulation model. Volume 2: Computer implementation
[NASA-CR-145332] p0543 N78-30043
REXOR 2 rotorcraft simulation model. Volume 3: User's manual
[NASA-CR-145333] p0543 N78-30044
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 1
[NASA-CR-145369-VOL-1] p0560 N78-31085
Study of fuel systems for LH2-fueled subsonic transport aircraft, volume 2
[NASA-CR-145369-VOL-2] p0560 N78-31086
General aviation airplane structural crashworthiness user's manual. Volume 1: Program KRASH theory
[AD-A055898] p0560 N78-31088
Study on utilization of advanced composites in commercial aircraft wing structures. Volume 1: Executive summary
[NASA-CR-145381-1] p0613 N78-32187
Study on utilization of advanced composites in commercial aircraft wing structures, volume 2
[NASA-CR-145381-2] p0613 N78-32188
Flaw growth in complex structure. Volume 3: Summary, assessments, conclusions
[AD-A055483] p0617 N78-32504
The common case study: Lockheed design of a supersonic cruise vehicle
[NASA-CR-158935] p0625 N78-33086
Flaw growth in complex structure. Volume 1: Technical discussion
[AD-A056372] p0633 N78-33483

LOCKHEED-CALIFORNIA CO., SAN DIEGO.
Development and flight evaluation of active controls in the L-1011
p0496 N78-29051

LOCKHEED-GEORGIA CO., MARIETTA.
Service experience of composite parts on the L-1011 and C-130
p0192 A78-24548
Material development for laminar flow control wing panels
p0218 A78-25200
Moving ground simulation by tangential blowing
[AIAA 78-814] p0297 A78-32368
Calculation of far-field jet noise spectra from near-field measurements using true source location
[AIAA PAPER 78-1153] p0422 A78-41852
The development and evaluation of advanced technology laminar-flow-control subsonic transport aircraft
[AIAA PAPER 78-96] p0592 A78-52626
Noise characteristics of upper surface blown configurations. Experimental program and results
[NASA-CR-145143] p0027 N78-10091
Further development of a viscous vortex/wing interaction program
[AD-A046342] p0148 N78-15015
Projected role of advanced computational aerodynamic methods at the Lockheed-Georgia company
p0269 N78-19787
Cruise aerodynamics of USB nacelle/wing geometric variations
p0390 N78-24057
USB flow characteristics related to noise generation
p0391 N78-24060
Characteristics of USB noise
p0391 N78-24061
Analytical developments for definition and prediction of USB noise
p0391 N78-24062
Noise characteristics of upper surface blown configurations: Summary
[NASA-CR-2918] p0446 N78-26880
Toward a laminar-flow-control transport
p0449 N78-27071
Noise characteristics of upper surface blown configurations: Analytical Studies
[NASA-CR-2812] p0460 N78-27870

LOCKHEED MISSILES AND SPACE CO., HUNTSVILLE, ALA.
Ground simulation and tunnel blockage for a swept, jet-flapped wing tested to very high lift coefficients
[NASA-CR-152032] p0092 N78-13008
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
Development of base pressure similarity parameters for application to space shuttle launch vehicle power-on aerodynamic testing
[NASA-CR-150826] p0631 N78-33134

LOCKHEED MISSILES AND SPACE CO., PALO ALTO, CALIF.
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
Correlation of microstructure with fracture toughness properties in metals, part 3
[AD-A043741] p0045 N78-11238
Outline of aeroelastic phenomena
p0204 N78-17003
Superelement method of designing a helicopter fuselage
p0206 N78-17043

LOCKHEED MISSILES AND SPACE CO., SUNNYVALE, CALIF.
Reynolds number criticality in dynamic tests
[AIAA PAPER 78-166] p0160 A78-20718
Scaling problems in dynamic tests of aircraft-like configurations
p0347 N78-22057

LOUGHBOROUGH UNIV. OF TECHNOLOGY (ENGLAND).
A further survey of some effects of aircraft noise in residential communities near London (Heathrow) airport
[TT-7705] p0556 N78-30910
A comparison of annoyance caused by aircraft noise near London, Manchester and Liverpool airports
[TT-7706] p0557 N78-30911

LUCAS AEROSPACE LTD., BURNLEY (ENGLAND).
Practical solutions to the cooling of combustors operating at high temperatures
p0320 N78-21135
Evaluation of a ceramic combustion chamber for a small gas turbine engine
p0322 N78-21145

M

MAN-ACOUSTICS AND NOISE, INC., SEATTLE, WASH.
Commercial airport operations and community noise criteria
[AD-A057451] p0634 N78-33615

MARCONI-ELLIOTT AVIONIC SYSTEMS LTD., ROCHESTER (ENGLAND).
System integration and safety monitoring to achieve integrity in low altitude flight control systems
p0432 N78-26059

MARCONI SPACE AND DEFENCE SYSTEMS LTD., CAMBERLEY (ENGLAND).
The philosophy adopted for the flight testing of the Panavia Tornado avionics system in Hack aircraft
p0243 N78-18060

MARTIN MARIETTA CORP., BALTIMORE, MD.
Boundary layer over spinning blunt-body of revolution at incidence including magnus forces
[AD-A049199] p0255 N78-19072

MARYLAND UNIV., COLLEGE PARK.
Turbojet engine performance at high turbine entry temperatures with transpiration cooled turbine blading
p0351 N78-22095

MASSACHUSETTS INST. OF TECH., CAMBRIDGE.
The stochastic control of the F-8C aircraft using a multiple model adaptive control /MMAC/ method. I - Equilibrium flight
p0013 A78-12359
F-8 DFBW sensor failure identification using analytic redundancy
p0013 A78-12362
A simplified Mach number scaling law for helicopter rotor noise
p0339 A78-35371
Photochemistry and dynamics of the ozone layer
p0381 A78-38766
An Assessment of Technology for Turbojet Engine Rotor Failures
[NASA-CP-2017] p0025 N78-10068
Analysis of simple 2-D and 3-D metal structures subjected to fragment impact
p0026 N78-10078
Soot formation in a turbulent swirling flow
p0040 N78-11075

Project SQUID
[AD-A047076] p0199 N78-16056
A lifting surface theory for wings experiencing leading-edge separation
[AD-A048439] p0253 N78-19061
Nitric oxide formation in gas turbine engines: A theoretical and experimental study
[NASA-CR-2977] p0319 N78-21116
Systematic studies of heat transfer and film cooling effectiveness
p0322 N78-21146
Studies on transonic turbine with film-cooled blades
[AD-A052423] p0399 N78-24149
The effect of tip vortex structure on helicopter noise due to blade/vortex interaction
[NASA-CR-152150] p0412 N78-25832
A study of the lift-to-drag ratio capability of caret wing waveriders
[AD-A053691] p0498 N78-29069
Experimental investigation of gust response of hingeless helicopter rotors
[AD-A054752] p0552 N78-30142
A study of analog programming for prediction of crack growth in aircraft structures subjected to random loads
[AD-A055789] p0562 N78-31097
Wind tunnel investigations of model rotor noise at low tip speeds
p0620 N78-32828
MATERIALS RESEARCH LABS., MELBOURNE (AUSTRALIA).
Safe air-space requirements above an explosive-ordnance test facility
[MRL-R-711] p0451 N78-27092
MATHTECH, INC., BETHESDA, MD.
Study of the turbine engine industry
[AD-A055895] p0612 N78-32103
MAX-PLANCK-INSTITUT FUER EXTRATERRESTRISCHE PHYSIK, GARCHING (WEST GERMANY).
Assess II - A simulated mission of Spacelab
p0569 A78-50276
MAXWELL LABS., INC., WOBURN, MASS.
Inductor network development for aircraft high power supplies
[AD-A052750] p0409 N78-25096
MCDONNELL AIRCRAFT CO., ST. LOUIS, MO.
Development of the propulsion simulator - A test tool applicable to V/STOL configurations
[SAE PAPER 770984] p0180 A78-23823
Turbine engine variable cycle selection program summary
[AD-A043408] p0029 N78-10108
Multi jet induced forces and moments on VTOL aircraft hovering in and out of ground effect
[AD-A042450] p0033 N78-11009
Effect of fighter attack spectrum on crack growth
[AD-A042369] p0037 N78-11054
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 1: Validation and sensitivity study
[AD-A045034] p0085 N78-12077
Intrasystem electromagnetic compatibility analysis program (IEMCAP) F-15 validation. Part 2: Interpretation of the integrated margin
[AD-A045035] p0086 N78-12078
High acceleration cockpit simulator evaluation
[AD-A045165] p0100 N78-13081
Stress history simulation. Volume 2: A users manual for a computer program to modify stress history simulations
[AD-A042785] p0206 N78-17044
Evaluation of a large capacity heat pump concept for active cooling of hypersonic aircraft structure
[NASA-CR-145301] p0212 N78-17339
MIL-P-83300; view from an aircraft designer
p0258 N78-19101
Rationale for selection of a flight control system for lift cruise fan V/STOL aircraft
[GP77-0375-28] p0259 N78-19112
Generalized procedures for tracking crack growth in fighter aircraft
[AD-A048847] p0260 N78-19121
Multiband antenna system for tactical aircraft
[AD-A049699] p0325 N78-21363
Variable cycle engine evaluations for supersonic V/STOL fighters. Phase 2 and 3 technical report
[AD-A053361] p0409 N78-25097
Variable cycle engine evaluations for supersonic V/STOL fighters. Management summary report
[AD-A053362] p0409 N78-25098
Flight test verification of F-15 performance predictions
p0436 N78-26090
Summary of landing gear initial flaws
[AD-A054048] p0500 N78-29095
Fighter superiority by design
p0549 N78-30105
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 1: Technical discussion
[NASA-CR-144866] p0551 N78-30123
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 2: Time variant data quality analysis plots
[NASA-CR-144867] p0551 N78-30124
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 3: Power spectral density plots
[NASA-CR-144868] p0551 N78-30125
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 4: Autocorrelation functions
[NASA-CR-144869] p0551 N78-30126
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 5: Effect of filter cutoff frequency on turbulence plots
[NASA-CR-144870] p0552 N78-30127
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 6: Distortion analysis plots
[NASA-CR-144871] p0552 N78-30128
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 7: Cross correlation functions.
[NASA-CR-144872] p0552 N78-30129
F-15 inlet/engine test techniques and distortion methodologies studies. Volume 8: Cross spectral density plots
[NASA-CR-144873] p0552 N78-30130
F-15 inlet engine test techniques and distortion methodologies studies. Volume 9: Stability audits
[NASA-CR-144874] p0552 N78-30131
MCDONNELL-DOUGLAS ASTRONAUTICS CO., HUNTINGTON BEACH, CALIF.
Modification of aerojet cumulative damage criterion to utilize nonlinear stress allowable
p0100 N78-13223
Aerodynamic computer code for computing pressure loading on complete missile for structural analysis
[AD-A048840] p0254 N78-19065
MCDONNELL-DOUGLAS ASTRONAUTICS CO., ST. LOUIS, MO.
The USAF stability and control digital DATCOM. Volume 2: Implementation of DATCOM methods
[AD-A045172] p0089 N78-12101
The USAF stability and control digital DATCOM. Volume 1: Users manual
[AD-A045171] p0089 N78-12102
Flutter of control surfaces with structural nonlinearities
[AD-A045221] p0099 N78-13073
MCDONNELL-DOUGLAS CORP., LONG BEACH, CALIF.
Modeling and parameter uncertainties for aircraft flight control system design
[AIAA 78-1371] p0484 A78-46558
A three-dimensional potential-flow program with a geometry package for input data generation
[NASA-CR-145311] p0312 N78-21047
MCDONNELL-DOUGLAS CORP., ST. LOUIS, MO.
Conceptual design study of a Harrier V/STOL research aircraft
[NASA-CR-152086] p0257 N78-19094
Thermal design for areas of interference heating on actively cooled hypersonic aircraft
[NASA-CR-2828] p0306 N78-20117
HF radiation characteristics of the RH-53D helicopter and the Mark 105 AMCM system
[AD-A049795] p0325 N78-21358
AV-8B composite wing government/industry briefing
p0396 N78-24113
Modification of the Douglas Neumann program to improve the efficiency of predicting component interference and high lift characteristics
[NASA-CR-3020] p0544 N78-30051

MCDONNELL-DOUGLAS RESEARCH LABS., ST. LOUIS, MO.
Viscous flowfields and airframe forces induced by two-dimensional lift jets in ground effect
[AD-A043518] p0034 N78-11013
Viscous flow simulations in VTOL aerodynamics
p0269 N78-19791
MECHANICAL TECHNOLOGY, INC., LATHAM, N. Y.
Advanced compressor seal tests
[AD-A042390] p0029 N78-10102
Turbine engine rotor dynamic evaluation. Volume 2: Engine and test rig balancing
[AD-A054533] p0502 N78-29108
Turbine engine rotordynamic evaluation, volume 1
[AD-A055262] p0563 N78-31111
MECHANICS RESEARCH, INC., MCLEAN, VA.
Feasibility analysis for a microwave deicer for helicopter rotor blades
[AD-A042581] p0022 N78-10052
Demonstration of the microwave ice protection concept
[AD-A055824] p0561 N78-31096
MESSERSCHMITT-BOELKOW-BLOHM G.M.B.H., HAMBURG (WEST GERMANY).
The thickness distribution of profiles for shock-free flow without lift
[DLR-IB-151-77/9] p0138 N78-14008
Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
Civil components program "Wing Section'. Position of structure transition joints, arrangement of landing gear
[BMFT-FB-W-77-36] p0350 N78-22090
Civil components program "Wing Section' Materials selection
[BMFT-FB-W-77-37] p0351 N78-22091
MESSERSCHMITT-BOELKOW-BLOHM G.M.B.H., MUNICH (WEST GERMANY)
Long term experience with a hingeless/composite rotor
p0262 N78-19137
Airframe response to separated flow
p0438 N78-26116
Application of strapdown inertial navigation to high performance fighter aircraft
p0439 N78-26131
Impact of active control on structures design
p0550 N78-30113
Display systems and cockpit design
p0550 N78-30116
Asymmetric store flutter
p0566 N78-31127
MESSERSCHMITT-BOELKOW-BLOHM G.M.B.H., OTTOBRUNN (WEST GERMANY).
A method for calculation of the pressure distribution of wing-body configurations for large angle of attack at subsonic speed
[BMVG-FBWT-77-15] p0238 N78-18013
MESSERSCHMIDT-BOELKOW G.M.B.H., MUNICH (WEST GERMANY).
Drag measurement in transonic wind tunnels
p0435 N78-26080
MICHIGAN UNIV., ANN ARBOR.
The effect of ambient conditions on the emissions of an idling gas turbine
[AIAA PAPER 78-3] p0171 A78-22551
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
Calculation of CO concentration for liquid fueled gas turbine combustor
p0572 A78-50560
Aeroelastic analysis and ground vibration survey of the NASA, Grumman American Yankee modified for spin testing
[NASA-CR-156119] p0305 N78-20109
System optimization by periodic control
[AD-A049522] p0323 N78-21162
Definition of tire properties required for landing system analysis
[NASA-CR-156171] p0324 N78-21326
APL radiometer wind tunnel test program with simulated aircraft radome
[BSR-4230] p0325 N78-21402
Lightweight, low compression aircraft diesel engine
[NASA-CR-135300] p0325 N78-21471
Combustion and emission characteristics of a gas turbine combustor
p0610 N78-32095
Heat transfer augmentation in flows over and normal to high-porosity perforated surfaces
p0615 N78-32371
MIDDLE EAST TECHNICAL UNIV., ANKARA (TURKEY).
Erosion prevention and film cooling on vanes
p0320 N78-21128
Dynamic nondestructive testing of materials
p0444 N78-26470
MINISTRY OF DEFENCE, LONDON (ENGLAND).
British Military helicopter programmes
p0262 N78-19130
Guidance and control for low level offensive aircraft: A Royal Air Force view
p0431 N78-26050
MINNESOTA UNIV., MINNEAPOLIS.
On an acoustic field generated by subsonic jet at low Reynolds numbers
[NASA-CR-156182] p0356 N78-22858
MISSISSIPPI STATE UNIV., MISSISSIPPI STATE.
Pilot evaluation of sailplane handling qualities
[NASA-CR-2960] p0360 N78-23081
MISSOURI UNIV., ROLLA.
On sound transmission into a heavily-damped cylinder
p0285 A78-31019
MISSOURI UNIV. - COLUMBIA.
Inherent errors in asynchronous digital flight controls
[AD-A055649] p0565 N78-31124
MITRE CORP., BEDFORD, MASS.
Digital avionics cassette transfer system and a program loader for IBM System/4Pi CP-2
[AD-A044020] p0085 N78-12075
MITRE CORP., MCLEAN, VA.
Initial collision avoidance algorithms for the beacon-based collision avoidance system
[AD-A047254] p0196 N78-16031
Assessment of the performance of an active ATCRBS mode for beacon collision avoidance
[AD-A047670] p0196 N78-16032
Concepts for estimating capacity of basic runway configurations
[PB-274578/4] p0240 N78-18036
Benefits of MLS guidance for curved approaches. Volume 2: Operational benefits for New York Airports
[PB-274585/9] p0240 N78-18037
Concepts for determination of longitudinal separation standards on final approach
[PB-274590/9] p0240 N78-18038
Impact of FAA E and D elements: Eight airport summary
[AD-A054245] p0489 N78-28077
Parameters of future ATC systems relating to airport capacity/delay
[AD-A055482] p0566 N78-31130
Analysis of runway occupancy times at major airports
[AD-A056052] p0566 N78-31131
Parameters of future ATC systems relating to airport capacity/delay
[AD-A057059] p0624 N78-33068
MOTOREN- UND TURBINEN-UNION MUENCHEN G.M.B.H. (WEST GERMANY).
Hot cascade test results of cooled turbine blades and their application to actual engine conditions
p0319 N78-21125
Variable-cycle engine fighter aircraft: Advance in performance and development problems
p0549 N78-30109

N

NATIONAAL LUCHT-EN RUIMTEVAARTLABORATORIUM, AMSTERDAM (NETHERLANDS).
Heat treatment studies of aluminum alloy type 7050 forgings. The effect of heat treatment on a variety of engineering properties
[NLR-TR-76008-U] p0410 N78-25199
NATIONAL AERONAUTICAL ESTABLISHMENT, OTTAWA (ONTARIO).
The dissec on of an aircraft loads spectrum produced [illegible] peak-counting accelerometers
[LTR-ST-5[illegible]] p0202 N78-16391
Modifications to FALSTAFF that were required for operation on a 16 K PDP-8e minicomputer
[LTR-ST-899] p0202 N78-16392

The NAE airborne V/STOL simulator
p0263 N78-19145
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D. C.
Future opportunities in digital avionics - NASA's role
[AIAA 77-1468] p0004 A78-12227
Active controls for transports
p0112 A78-18020
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Integrity in flight control systems
p0182 A78-23873
The NASA Aircraft Energy Efficiency Program
p0286 A78-31302
NASA technical advances in aircraft occupant safety
[SAE PAPER 780020] p0331 A78-33361
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
Propulsion test facilities - Capabilities and use
[AIAA PAPER 78-933] p0519 A78-48453
Aircraft developments that hold promise for increased compatability with an advanced ATC system
p0595 A78-52967
Effect of flap deflection on the lift coefficient of wings operating in a biplane configuration
[NASA-TM-75059] p0033 N78-11003
A survey of computational aerodynamics in the United States
[NASA-SP-394] p0033 N78-11007
Aerodynamic investigation of an air-cooled axial-flow turbine. Part 2: Rotor blade tip-clearance effects on overall turbine performance and internal gas flow conditions: Experimental results and prediction methods
[NASA-TM-75138] p0038 N78-11061
Concepts for the design of a completely active helicopter isolation system using output vector feedback
[NASA-TM-75161] p0042 N78-11114
Flight simulators. Part 1: Present situation and trends. Part 2: Implications for training
[NASA-TM-75156] p0043 N78-11119
Flutter analysis of a glider made of synthetic materials
[NASA-TM-75160] p0079 N78-12012
Wake Vortex Minimization
[NASA-SP-409] p0079 N78-12017
High temperature corrosion-resistant protective coatings in stationary gas turbines
[NASA-TM-75181] p0086 N78-12080
New materials for high temperature turbines; ONERA's DS composites confronted with blade problems
[NASA-TM-75216] p0087 N78-12085
Protection of cooled blades of complex internal structure
[NASA-TM-75217] p0087 N78-12086
Investigation of the jet-wake flow of a highly loaded centrifugal compressor impeller
[NASA-TM-75232] p0198 N78-16051
Aerospatiale is ready to develop a convertiplane with tethering rotors
[NASA-TM-75038] p0206 N78-17042
Experimental testing of flight control head up displays
[NASA-TM-75205] p0208 N78-17053
A new helicostat from SNIAS helicopter division
[NASA-TM-75063] p0240 N78-18041
Effect of perturbed flow on the transition from the supersonic laminar boundary layer to the turbulent
[NASA-TM-75196] p0252 N78-19048
Transonic flow past an airfoil with condensation
[NASA-TM-75201] p0252 N78-19053
Low cycle fatigue in turbines
[NASA-TM-75264] p0264 N78-19156
Approximate dynamic model of a turbojet engine
[NASA-TM-75263] p0264 N78-19159
Airfoil profile in a nonuniform flow
[NASA-TM-75272] p0312 N78-21048
Alternate-fueled transport aircraft possibilities
[NASA-TM-78330] p0348 N78-22073
The future of wind tunnel technology in Germany
[NASA-TM-75244] p0364 N78-23106
Investigations of the influence of the profile thickness of the compressible plane flow through compressor cascades
[NASA-TM-75277] p0393 N78-24084
Methods and results of boundary layer measurements on a glider
[NASA-TM-75294] p0394 N78-24085
Drag reduction for gliders
[NASA-TM-75293] p0396 N78-24116
Fundamental aspects of the aerodynamics of turbojet engine combustors
[NASA-TM-75287] p0398 N78-24142
Carbon fiber study
[NASA-TM-79449] p0401 N78-24292
Propulsion-airframe interactions predictability
p0434 N78-26079
Measurement of low turbulence levels with a thermoanemometer
[NASA-TM-75282] p0438 N78-26105
Aviation fuels beyond the 1980's
[NASA-TM-79510] p0442 N78-26223
Can acoustic emission detect the initiation of fatigue cracks: Application to high-strength light alloys used in aeronautics
[NASA-TM-75306] p0445 N78-26493
Overview of NASA CTOL program
p0446 N78-27047
A finite volume method for calculating transonic potential flow around wings from the pressure minimum integral
[NASA-TM-75324] p0450 N78-27081
Studies in experimental aerodynamics
[NASA-TT-F-17158] p0450 N78-27086
The prospects for composites based on boron fibers
[NASA-TM-75305] p0457 N78-27185
Overview of safety research
p0497 N78-29054
The technology assessment of LTA aircraft systems
[NASA-TM-75535] p0603 N78-32043
Design of a transonically profiled wing
[NASA-TM-75440] p0604 N78-32052
Profile design for an advanced-technology airfoil for general aviation aircraft
[NASA-TM-75323] p0605 N78-32054
High-temperature ceramics for automobile gas turbines
[NASA-TM-75457] p0614 N78-32264
High temperature ceramics for automobile gas turbines. Part 2: Development of ceramic components
[NASA-TM-75302] p0614 N78-32265
Dynamic stall: An example of strong interaction between viscous and inviscid flows
[NASA-TM-75447] p0615 N78-32384
Chevron cutting: Experiment with new runway mixtures
[NASA-TM-75448] p0616 N78-32427
Some principles for studying reduced visibility conditions in regions around airports
[NASA-TM-75152] p0617 N78-32642
From space on a parachute
[NASA-TM-75577] p0631 N78-33140
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. AMES RESEARCH CENTER, MOFFETT FIELD, CALIF.
On the prediction of viscous phenomena in transonic flows
p0012 A78-12308
Toward a new V/STOL generation
p0016 A78-13071
Feasibility of modern airships - Preliminary assessment
p0050 A78-13416
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Effect of a nonconstant C/m-alpha/ on the stability of rolling aircraft
p0071 A78-16180
Moving V/STOL from technology to system
p0075 A78-16693
Tilt-proprotor perspective
p0075 A78-16694
Lift/cruise fan VTOL aircraft
p0076 A78-16695
How good is jet lift VTOL technology
p0076 A78-16696
Displacement thickness distributions in transonic flows about 3-D wings

p0108 A78-17612
Robustness in linear quadratic feedback design with application to an aircraft control problem
p0113 A78-18059
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0114 A78-18464
Flight-test measurements of ground effect - STOL airplanes
p0123 A78-19433
Calculation of unsteady transonic flows using the integral equation method
[AIAA PAPER 78-13] p0157 A78-20632
Transonic wing analysis using advanced computational methods
[AIAA PAPER 78-105] p0158 A78-20686
Laser-velocimeter surveys of merging vortices in a wind tunnel
[AIAA PAPER 78-107] p0158 A78-20687
Steady and unsteady transonic flow
[AIAA PAPER 78-160] p0160 A78-20713
A split-recoupled-semidirect computational technique applied to transonic flow over lifting airfoils
[AIAA PAPER 78-11] p0171 A78-22553
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Measured wake-vortex characteristics of aircraft in ground effect
[AIAA PAPER 78-109] p0173 A78-22578
XV-15 tilt rotor test - Progress report
[SAE PAPER 770953] p0179 A78-23804
Development of the propulsion simulator - A test tool applicable to V/STOL configurations
[SAE PAPER 770984] p0180 A78-23823
Robustness of linear quadratic state feedback designs in the presence of system uncertainty
p0184 A78-23917
Comments on 'Feasibility study of a hybrid airship operating in ground effect'
p0188 A78-24367
Three-dimensional canard-wing shape optimization in aircraft cruise and maneuver environments
[AIAA PAPER 78-99] p0223 A78-26274
Flight simulation - A vital and expanding technology in aircraft development
[AIAA PAPER 78-337] p0275 A78-29295
Remotely piloted aircraft in the civil environment
p0283 A78-30506
Influence of spin rate on side force of an axisymmetric body
p0284 A78-30690
The shock tube as a device for testing transonic airfoils at high Reynolds numbers
[AIAA 78-769] p0294 A78-32330
New rotation-balance apparatus for measuring airplane spin aerodynamics in the wind tunnel
[AIAA 78-835] p0298 A78-32386
AIC/50/ values for some polymeric materials
p0371 A78-36596
Notes on the transonic indicial method
p0376 A78-37732
Simulation replay - Implementation and flight simulation applications
p0381 A78-38789
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[AIAA PAPER 78-1137] p0421 A78-41841
Hot-wire, laser anemometer and force balance measurements of cross-sectional planes of single and interacting trailing vortices
[AIAA PAPER 78-1194] p0422 A78-41885
The spanwise lift distribution on a wing from flow-field velocity surveys
[AIAA PAPER 78-1195] p0422 A78-41886
Effects of inlet airframe integration on the inlet of an upper surface blowing four-engine STOL aircraft
[AIAA PAPER 78-959] p0463 A78-43521
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Theoretical and experimental study of the drag of multielement airfoils
[AIAA PAPER 78-1223] p0476 A78-45148
The relative fire resistance of select thermoplastic materials
p0480 A78-45475
The numerical solution of viscous flows at high Reynolds number
p0481 A78-46360
A historical overview of stall/spin characteristics of general aviation aircraft
[AIAA PAPER 78-1551] p0482 A78-46514
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
Quiet, Short-Haul Research Aircraft - Current status and future plans
[AIAA PAPER 78-1468] p0512 A78-47916
Integrated avionics for future general aviation aircraft
[AIAA PAPER 78-1482] p0514 A78-47927
Application of advanced high speed turboprop technology to future civil short-haul transport aircraft design
[AIAA PAPER 78-1487] p0514 A78-47930
Studies of aerodynamic technology for VSTOL fighter/attack aircraft
[AIAA PAPER 78-1511] p0516 A78-47946
Assessment of relative flammability and thermochemical properties of some thermoplastic materials
p0526 A78-49693
A method for localizing wing flow separation at stall to alleviate spin entry tendencies
[AIAA PAPER 78-1476] p0528 A78-49787
V/STOL aircraft simulation - Requirements and capabilities at Ames Research Center
[AIAA PAPER 78-1515] p0529 A78-49790
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
Assess II - A simulated mission of Spacelab
p0569 A78-50276
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
p0589 A78-51838
Calculated hovering helicopter flight dynamics with a circulation controlled rotor
[NASA-TM-78443] p0017 N78-10002
Low speed aerodynamic characteristics of an 0.075-scale F-15 airplane model at high angles of attack and sideslip
[NASA-TM-X-62360] p0019 N78-10019
Static aerodynamic characteristics of a 0.035-scale model of a modified NKC-135 airplane at a Mach number of 0.28
[NASA-TM-73250] p0079 N78-12011
Inviscid modeling of aircraft trailing vortices
p0080 N78-12018
Application of laser velocimetry to aircraft wake-vortex measurements
p0080 N78-12021
Flight test techniques for wake-vortex minimization studies
p0080 N78-12022
Aircraft wake-vortex minimization by use of flaps
p0081 N78-12026
Aeroelastic stability analysis of the AD-1 manned oblique-wing aircraft
[NASA-TM-78439] p0095 N78-13037
Aerodynamic characteristics of a small-scale straight and swept-back wing with knee-blown jet flaps
[NASA-TM-78427] p0137 N78-13998
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 0.70 to 1.15
[NASA-TM-78432] p0152 N78-15056
Aerodynamic characteristics of an F-8 aircraft configuration with a variable camber wing at Mach numbers from 1.5 to 2.0
[NASA-TM-73271] p0199 N78-16062
Study of the application of an implicit model-following flight controller to lift-fan VTOL aircraft
[NASA-TP-1040] p0199 N78-16063
Dynamic stall experiments on the NACA 0012 airfoil
[NASA-TP-1100] p0204 N78-17000

Two-dimensional transonic testing with splitter plates
[NASA-TP-1153] p0236 N78-17999
Flight test results of the strapdown hexad inertial reference unit (SIRU). Volume 2: Test report
[NASA-TM-73223] p0239 N78-18025
Aeromechanical stability of helicopters with a bearingless main rotor. Part 1: Equations of motion
[NASA-TM-78459] p0240 N78-18043
Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] p0246 N78-18083
Introduction to unsteady aspects of separation in subsonic and transonic flow
p0249 N78-18381
Some unsteady separation problems for slender bodies
p0249 N78-18383
Prediction of unsteady separated flows on oscillating airfoils
p0250 N78-18387
Two-dimensional oscillating airfoil test apparatus
p0251 N78-19042
The role of time-history effects in the formulation of the aerodynamics of aircraft dynamics
[NASA-TM-78471] p0253 N78-19056
Water-tunnel experiments on an oscillating airfoil at RE equals 21,000
[NASA-TM-78446] p0253 N78-19058
A comparison of V/STOL handling requirements with the VAK-191B
p0258 N78-19100
A piloted simulation of V/STOL landings aboard a non-aviation ship
p0259 N78-19106
Pilot centered requirements in control/display design
p0259 N78-19110
Evaluation of the tilt rotor concept: The XV-15's role
p0263 N78-19142
Future Computer Requirements for Computational Aerodynamics
[NASA-CP-2032] p0268 N78-19778
Computational aerodynamics and the numerical aerodynamic simulation facility
p0268 N78-19779
Future requirements and roles of computers in aerodynamics
p0269 N78-19786
Conservative implicit schemes for the full potential equation applied to transonic flows
[NASA-TM-78469] p0271 N78-19868
Flight test results of the Strapdown hexad Inertial Reference Unit (SIRU). Volume 3: Appendices A-G
[NASA-TM-73224] p0303 N78-20098
A simple method for estimating minimum autorotative descent rate of single rotor helicopters
[NASA-TM-78452] p0305 N78-20113
Comparison of measured and calculated helicopter rotor impulsive noise
[NASA-TM-78473] p0311 N78-20917
Effect of high lift flap systems on the conceptual design of a 1985 short-haul commercial STOL tilt rotor transport
[NASA-TM-78474] p0316 N78-21094
A note on multicyclic control by swashplate oscillation
[NASA-TM-78475] p0323 N78-21159
Fire resistivity and toxicity studies of candidate aircraft passenger seat materials
[NASA-TM-78468] p0324 N78-21214
Low-speed aerodynamic characteristics of a 0.08-scale YF-17 airplane model at high angles of attack and sideslip
[NASA-TM-78438] p0345 N78-22025
Dynamic stall of an oscillating airfoil
p0346 N78-22055
Optimum horizontal guidance techniques for aircraft
p0356 N78-23016
Quasi-optimal control of a moving-base simulator
p0357 N78-23021
Optimal guidance and control for investigating aircraft noise-impact reduction
[NASA-TP-1237] p0363 N78-23100
NASA aviation safety reporting system
[NASA-TM-78476] p0406 N78-25071
Calculation of supersonic viscous flow over delta wings with sharp subsonic leading edges
[NASA-TM-78500] p0437 N78-26101
Computational wing optimization and comparisons with experiment for a semi-span wing model
[NASA-TM-78480] p0438 N78-26106
Trajectory module of the NASA Ames Research Center aircraft synthesis program ACSYNT
[NASA-TM-78497] p0439 N78-26133
A flight investigation of the stability, control, and handling qualities of an augmented jet flap STOL airplane
[NASA-TP-1254] p0441 N78-26151
Application of a cost/performance measurement system on a research aircraft project
[NASA-TM-78498] p0446 N78-27043
Application of special-purpose digital computers to rotorcraft real-time simulation
[NASA-TP-1267] p0453 N78-27113
Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-2] p0457 N78-27184
Wing analysis using a transonic potential flow computational method
[NASA-TM-78464] p0487 N78-28053
Phenomenological aspects of quasi-stationary controlled and uncontrolled three-dimensional flow separations
p0493 N78-28402
Some unsteady separation problems for slender bodies
p0493 N78-28405
Prediction of unsteady separated flows on oscillating airfoils
p0494 N78-28409
Status and future prospects of using numerical methods to study complex flows at High Reynolds numbers
p0494 N78-28410
Project plan for joint FAA/NASA head-up display concept evaluation
[NASA-TM-78512] p0495 N78-28979
An experimental investigation of hingeless helicopter rotor-body stability in hover
[NASA-TM-78489] p0496 N78-29044
Wind tunnel investigation of computationally optimized variable camber wing configurations
[NASA-TM-78479] p0497 N78-29067
Closed-form equations for the lift, drag, and pitching-moment coefficients of airfoil sections in subsonic flow
[NASA-TM-78492] p0498 N78-29068
Requirements for regional short-haul air service and the definition of a flight program to determine neighborhood reactions to small transport aircraft
[NASA-CR-152151] p0546 N78-30070
Characteristics of constrained optimum trajectories with specified range
[NASA-TM-78519] p0546 N78-30072
An assessment of the effect of supersonic aircraft operations on the stratospheric ozone content
[NASA-RP-1026] p0556 N78-30774
High angle of incidence implications upon air intake design and location for supersonic cruise aircraft and highly maneuverable transonic aircraft
[NASA-TM-78530] p0603 N78-32044
NASA aviation safety reporting system
[NASA-TM-78511] p0608 N78-32075
Angle detector
[NASA-CASE-ARC-11036-1] p0616 N78-32395
Hovering impulsive noise: Some measured and calculated results
p0620 N78-32831
A study of the noise radiation from four helicopter rotor blades
p0621 N78-32835
Laser-velocimeter surveys of merging vortices in a wind tunnel: Complete data and analysis
[NASA-TM-78449] p0622 N78-33043

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. HUGH L. DRYDEN FLIGHT RESEARCH CENTER, EDWARDS, CALIF.

Flight experience with a fail-operational digital fly-by-wire control system

[AIAA 77-1507] p0007 A78-12253
Strain gage calibration of a complex wing
p0071 A78-16182
Shuttle carrier aircraft flight tests
p0234 A78-28464
High-flying Mini-Sniffer RPV - Mars bound
p0379 A78-38521
Vortex attenuation flight experiments
p0081 N78-12028
Phugoid characteristics of a YF-12 airplane with variable-geometry inlets obtained in flight tests at a Mach number of 2.9
[NASA-TP-1107] p0089 N78-12100
Effect of winglets on a first-generation jet transport wing. 4: Stability characteristics for a full-span model at Mach 0.30
[NASA-TP-1119] p0235 N78-17997
Flight tests of a radio-controlled airplane mode with a free-wing, free-canard configuration
[NASA-TM-72853] p0240 N78-18042
Flight-determined stability and control coefficients of the F-111A airplane
[NASA-TM-72851] p0245 N78-18075
Analytical study of ride smoothing benefits of control system configurations optimized for pilot handling qualities
[NASA-TP-1148] p0246 N78-18076
An annular wing
[NASA-CASE-FRC-11007-1] p0253 N78-19055
A portable device particularly suited for use in starting air-start units for aircraft
[NASA-CASE-FRC-10113-1] p0265 N78-19166
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds
[NASA-TN-D-8474] p0299 N78-20065
Development of systems and techniques for landing an aircraft using onboard television
[NASA-TP-1171] p0305 N78-20114
Flight evaluation of the transonic stability and control characteristics of an airplane incorporating a supercritical wing
[NASA-TP-1167] p0309 N78-20140
Results from flight and simulator studies of a Mach 3 cruise longitudinal autopilot
[NASA-TP-1180] p0323 N78-21160
Flight-measured buffet characteristics of a supercritical wing and a conventional wing on a variable-sweep airplane
[NASA-TP-1244] p0358 N78-23056
Flight-measured pressure characteristics of aft-facing steps in high Reynolds number flow at Mach numbers of 2.20, 2.50, and 2.80 and comparison with other data
[NASA-TM-72855] p0405 N78-25055
Air speed and attitude probe
[NASA-CASE-FRC-11009-1] p0408 N78-25088
Comparison of concurrent strain gage- and pressure transducer-measured flight loads on a lifting reentry vehicle and correlation with wind tunnel predictions
[NASA-TP-1331] p0623 N78-33053
Aerodynamic derivatives for an oblique wing aircraft estimated from flight data by using a maximum likelihood technique
[NASA-TP-1336] p0623 N78-33054
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
ELECTRONICS RESEARCH CENTER, CAMBRIDGE, MASS.
Inertially-aided, all-weather landing systems for C/TOL
p0356 N78-23017
A frequency domain approach to handling qualities design
p0357 N78-23019
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
FLIGHT RESEARCH CENTER, EDWARDS, CALIF.
Comparison of nozzle and afterbody surface pressures from wind tunnel and flight test of the YF-17 aircraft
[AIAA PAPER 78-992] p0463 A78-43540
Maximum likelihood estimation of translational acceleration derivatives from flight data
[AIAA 78-1342] p0483 A78-46539
A technique for the assessment of fighter aircraft precision controllability
[AIAA 78-1364] p0484 A78-46553
Section drag coefficients from pressure probe traverses of a wing wake at low speeds
[AIAA PAPER 78-1479] p0514 A78-47924
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947
Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
Optimal regulator or conventional? Setup techniques for a model following simulator control system
p0357 N78-23020
A new formulation for the epsilon method applied to the minimum-time-to-climb problem
p0357 N78-23028
YF-12 experiments symposium, volume 1
[NASA-CP-2054] p0605 N78-32055
Overview of the NASA YF-12 program
p0605 N78-32056
Recent load calibrations experience with the YF-12 airplane
p0605 N78-32057
Flight-measured aerodynamic loads on a 0.92 aspect ratio lifting surface
p0605 N78-32058
Flight experience with altitude hold and Mach hold autopilots on the YF-12 aircraft at Mach 3
p0605 N78-32059
The YF-12 gust velocity measuring system
p0605 N78-32061
Flight-measured pressure characteristics of aft-facing steps in thick boundary layer flow for transonic and supersonic Mach numbers
p0606 N78-32063
Boundary layer, skin friction, and boattail pressure measurements from the YF-12 airplane at Mach numbers up to 3
p0606 N78-32064
In-flight compressible turbulent boundary layer measurements on a hollow cylinder at a Mach number of 3.0
p0606 N78-32065
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD INST. FOR SPACE STUDIES, NEW YORK.
A spectroradiometer for airborne remote sensing
p0298 A78-32396
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.
Atmospheric transformation of solar radiation reflected from the ocean
p0052 A78-13803
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEX.
Stator rotor tools
[NASA-CASE-MSC-16000-1] p0402 N78-24544
Space shuttle separation mechanisms
[NASA-TM-58210] p0613 N78-32177
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
LANGLEY RESEARCH CENTER, HAMPTON, VA.
Application of a multi-level grid method to transonic flow calculations
p0011 A78-12296
NASA's advanced control law program for the F-8 digital fly-by-wire aircraft
p0013 A78-12357
A moving window parameter adaptive control system for the F8-DFBW aircraft
p0013 A78-12361
Direct-connect test of a hydrogen-fueled three-strut injector for an integrated modular scramjet engine
p0053 A78-14254
A root locus property of the extended Bass algorithm
p0053 A78-14349

Radiation safety in high-altitude air traffic
p0071 A78-16184
Calculated heating on the afterbody nozzle of a hypersonic aircraft concept
p0072 A78-16186
Instrumentation complex for Langley Research Center's National Transonic Facility
p0106 A78-17372
The vehicle design evaluation program - A computer-aided design procedure for transport aircraft
p0109 A78-17891
Inlet boundary-layer shapes on four aircraft forebodies at Mach 6
p0115 A78-18638
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0117 A78-18799
Recent flight test results using an electronic display format on the NASA B-737
p0117 A78-18800
F-16 flutter model studies with external wing stores
p0117 A78-18801
Effects of external stores on the air combat capability of a delta wing fighter
p0117 A78-18802
Hydrogen fueled subsonic aircraft - A prospective
p0118 A78-18843
Study of heat sink thermal protection systems for hypersonic research aircraft
[AIAA PAPER 78-38] p0157 A78-20648
The application of dual fuel /JP-LH2/ for hypersonic cruise vehicles
[AIAA PAPER 78-149] p0159 A78-20705
An aerodynamic analysis of several hypersonic research airplane concepts from M = 0.2 to 6.0
[AIAA PAPER 78-150] p0159 A78-20706
Subsonic vortex-flow design study for slender wings
[AIAA PAPER 78-154] p0159 A78-20708
Toward scramjet aircraft
p0177 A78-23421
Ramjet propulsion for single-stage-to-orbit vehicles
[SAE PAPER 771011] p0182 A78-23843
Technical and economic evaluation of advanced air cargo system concepts
p0216 A78-24900
Response of periodic beam to supersonic boundary-layer pressure fluctuations
p0229 A78-27886
The year for shaping a digital operations R&D program
p0231 A78-28218
Integrated controls for a new aircraft generation
p0231 A78-28219
Coming cockpit avionics
p0231 A78-28220
Investigation of interior noise in a twin-engine light aircraft
p0277 A78-29641
Preliminary design of composite wings for buckling, strength and displacement constraints
[AIAA 78-466] p0278 A78-29777
Terminal-area flight experience with the NASA Terminal Configured Vehicle
p0291 A78-31972
A critical examination of expansion tunnel performance
[AIAA 78-768] p0294 A78-32329
Status and operational characteristics of the National Transonic Facility
[AIAA 78-770] p0294 A78-32331
Design and subscale tests of a diffuser system for a Mach 4 scramjet test facility
[AIAA 78-771] p0294 A78-32332
A parametric experimental study of the interference effects and the boundary-condition coefficient of slotted wind-tunnel walls
[AIAA 78-805] p0296 A78-32359
Condensation and its growth down the test-section of the Langley 0.3-m transonic cryogenic tunnel
[AIAA 78-811] p0296 A78-32365
A new technique for reducing test section noise in supersonic wind tunnels
[AIAA 78-817] p0297 A78-32371
Comparative vibration environments of transportation vehicles
p0331 A78-33442
Composite structures for commercial transport aircraft
p0337 A78-34901
Use of piloted simulation for studies of fighter departure/spin susceptibility
p0337 A78-34906
Aircraft flyover noise prediction
p0340 A78-35657
Observed variability of aircraft noise footprint measurements
p0341 A78-35662
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
Round jet in a cross flow - Influence of injection angle on vortex properties
p0377 A78-37744
Prediction of nearfield jet entrainment by an interactive mixing/afterburning model
[AIAA PAPER 78-1189] p0422 A78-41882
Strake-wing analysis and design
[AIAA PAPER 78-1201] p0423 A78-41891
Theoretical and experimental aerodynamics of strake-wing interactions up to high angles-of-attack
[AIAA PAPER 78-1202] p0423 A78-41892
Durability of foam insulation for LH2 fuel tanks of future subsonic transports
p0424 A78-41924
Interior noise studies for general aviation types of aircraft. I - Field studies. II - Laboratory studies
p0426 A78-42721
Air terminals and liquid hydrogen commercial air transports
p0427 A78-42860
CTOL concepts and technology development
p0461 A78-43358
Airframes and aerodynamics
p0461 A78-43359
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
A review of thrust-vectoring schemes for fighter applications
[AIAA PAPER 78-1023] p0465 A78-43556
Low speed aerodynamic characteristics of a vectored-engine-over-wing configuration
[AIAA PAPER 78-1081] p0466 A78-43587
The effect of over-the-wing nacelles on wing-body aerodynamics
[AIAA PAPER 78-1083] p0466 A78-43589
VALT parameter identification flight test
p0480 A78-45439
A perspective of laminar-flow control
[AIAA PAPER 78-1528] p0481 A78-46503
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
An acoustic range for the measurement of the noise signature of aircraft during flyby operations
p0508 A78-47242
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
Correlation of model and airplane spin characteristics for a low-wing general aviation research airplane
[AIAA PAPER 78-1477] p0513 A78-47922
Status of aerial applications research in the Langley Vortex Research Facility and the Langley full-scale wind tunnel
[AIAA PAPER 78-1481] p0514 A78-47926
Drones for aerodynamic and structural testing /DAST/ - A status report
[AIAA PAPER 78-1485] p0514 A78-47929
Improved aircraft dynamic response and fatigue life during ground operations using an active control landing gear system
[AIAA PAPER 78-1499] p0515 A78-47939
Flight experience on the need and use of inflight leading edge washing for a laminar flow airfoil
[AIAA PAPER 78-1512] p0516 A78-47947

Status of a nozzle-airframe study of a highly maneuverable fighter
[AIAA PAPER 78-990] p0520 A78-48470
A learning flight control system for the F8-DFBW aircraft
[AIAA 78-1288] p0542 A78-50195
Guidance and navigation for automatic landing, rollout, and turnoff using MLS and magnetic cable sensors
[AIAA 78-1296] p0542 A78-50203
An exploratory investigation of the effects of a thin plastic film cover on the profile drag of an aircraft wing panel
[NASA-TM-74073] p0019 N78-10023
Effect of a simulated engine jet blowing above an arrow wing at Mach 2.0
[NASA-TP-1050] p0020 N78-10030
Light airplane crash tests at impact velocities of 13 and 27 m/sec
[NASA-TP-1042] p0020 N78-10034
Effect of digitally computed drives on performance of continuous linear systems
[NASA-TN-D-8518] p0022 N78-10045
Validation of a Flexible Aircraft Take-Off and Landing Analysis (FATOLA)
[NASA-TP-1025] p0022 N78-10049
Description of path-in-the-sky contact analog piloting display
[NASA-TM-74057] p0024 N78-10062
The Liquid Hydrogen Option for the Subsonic Transport: A status report
[NASA-TM-74089] p0031 N78-10306
Concorde noise-induced building vibrations: International Airport Dulles
[NASA-TM-74083] p0032 N78-10839
F-16 flutter model studies with external wing stores
[NASA-TM-74078] p0033 N78-11004
Basic analysis of terminal operation benefits resulting from reduced vortex separation minima
[NASA-TM-78624] p0035 N78-11023
Experimental and analytical determination of characteristics affecting light aircraft landing-gear dynamics
[NASA-TM-X-3561] p0037 N78-11052
Wind-tunnel tests of wide-chord teetering rotors with and without outboard flapping hinges
[NASA-TP-1046] p0037 N78-11053
Calibration and test capabilities of the Langley 7- by 10- foot high speed tunnel
[NASA-TM-X-74027] p0043 N78-11121
Ground-based facilities for evaluating vortex minimization concepts
p0080 N78-12020
Unsuccessful concepts for aircraft wake vortex minimization
p0080 N78-12023
Thrust-augmented vortex attenuation
p0080 N78-12024
Ground development and flight correlation of the vortex attenuating spline device
p0080 N78-12025
The development and use of spoilers as vortex attenuators
p0081 N78-12027
Effects of external stores on the aerodynamic characteristics of a 60 deg delta-wing fighter model at Mach 1.60 to 2.87
[NASA-TM-74090] p0081 N78-12033
Performance of twin two-dimensional wedge nozzles including thrust vectoring and reversing effects at speeds up to Mach 2.20
[NASA-TN-D-8449] p0081 N78-12037
Aerodynamic characteristics at Mach numbers from 0.33 to 1.20 of a wing-body design concept for a hypersonic research airplane
[NASA-TP-1044] p0081 N78-12038
Spin-tunnel investigation of the spinning characteristics of typical single-engine general aviation airplane designs. 2: Low-wing model A, tail parachute diameter and canopy distance for emergency spin recovery
[NASA-TP-1076] p0082 N78-12040
Supersonic aerodynamic characteristics of a Sparrow 3 type missile model with wing controls and comparison with existing tail-control results
[NASA-TP-1078] p0082 N78-12041
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-X-74945] p0089 N78-12105
Subsonic longitudinal and lateral directional static stability characteristics of a variable sweep fighter configuration employing various control surface deflections at angles of attack of 0 deg to 50 deg and large sideslip angles
[NASA-TM-74050] p0092 N78-13010
Aerodynamic characteristics of airplanes at high angles of attack
[NASA-TM-74097] p0092 N78-13011
Effects of deflected thrust on the longitudinal aerodynamic characteristics of a close-coupled wing-canard configuration
[NASA-TP-1090] p0092 N78-13014
Theoretical and experimental analysis of longitudinal and lateral aerodynamic characteristics of skewed wings at subsonic speeds to high angles of attack
[NASA-TN-D-8512] p0093 N78-13015
Effects of roughness size on the position of boundary-layer transition and on the aerodynamic characteristics of a 55 deg. swept delta wing at supersonic speeds
[NASA-TP-1027] p0093 N78-13016
Effects of landing approach methods and separation intervals on single runway landing capacity
[NASA-TP-1112] p0094 N78-13029
A preliminary study of the performance and characteristics of a supersonic executive aircraft
[NASA-TM-74055] p0095 N78-13040
Rotor systems research aircraft simulation mathematical model
[NASA-TM-78629] p0095 N78-13041
Aircraft energy efficiency laminar flow control wing design study
[NASA-TM-78634] p0095 N78-13042
Friction characteristics of three 30 by 11.5-14.5, type 8, aircraft tires with various tread groove patterns and rubber compounds
[NASA-TP-1080] p0095 N78-13043
Flight-test evaluation of two electronic display formats for approach to landing under instrument conditions
[NASA-TP-1085] p0097 N78-13054
Effects of control inputs on the estimation of stability and control parameters of a light airplane
[NASA-TP-1043] p0099 N78-13071
Wind-tunnel investigation of the aerodynamic performance, steady and vibratory loads, surface temperatures and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TM-X-72794] p0140 N78-14031
Improvement of maneuver aerodynamics by spanwise blowing
[NASA-TP-1065] p0146 N78-14997
Considerations in the design of tip-coupled air-transport systems
[NASA-TM-78645] p0147 N78-15001
Nonlinear aeroelastic equations for combined flapwise bending, chordwise bending, torsion, and extension of twisted nonuniform rotor blades in forward flight
[NASA-TM-74059] p0147 N78-15002
Operational experience in the Langley expansion tube with various test gases
[NASA-TM-78637] p0152 N78-15060
Volumetric pattern analysis of airborne antennas
[NASA-TM-78327] p0153 N78-15324
Airborne antenna coverage requirements for the TCV B-737 aircraft
[NASA-TM-78647] p0153 N78-15325
Wind-tunnel investigation of aerodynamic performance, steady and vibratory loads, surface temperatures, and acoustic characteristics of a large-scale twin-engine upper-surface blown jet-flap configuration
[NASA-TN-D-8235] p0194 N78-15999
Longitudinal aerodynamic characteristics at Mach 0.60 to 2.86 of a fighter configuration with strut braced wing
[NASA-TP-1102] p0194 N78-16000

GEMPAK: An arbitrary aircraft geometry generator
[NASA-TP-1022] p0197 N78-16042
Internal performance predictions for Langley scramjet engine module
[NASA-TM-X-74038] p0208 N78-17057
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] p0210 N78-17070
Theoretical evaluation of high speed aerodynamics for arrow wing configurations
[NASA-TM-78659] p0235 N78-17992
A flight evaluation of a trailing anemometer for low-speed calibrations of airspeed systems on research aircraft
[NASA-TP-1135] p0241 N78-18044
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] p0241 N78-18045
Laser velocimeter survey about a NACA 0012 wing at low angles of attack
[NASA-TM-74040] p0247 N78-18084
Design and performance evaluation of slotted walls for two-dimensional wind tunnels
[NASA-TM-78648] p0247 N78-18085
Development and application of an optimization procedure for flutter suppression using the aerodynamic energy concept
[NASA-TP-1137] p0250 N78-18459
Eigenvalue/eigenvector assignment using output feedback
[NASA-TP-1118] p0251 N78-18823
Concorde noise-induced building vibrations John F. Kennedy International Airport
[NASA-TM-78660] p0251 N78-18873
Dynamic wind-tunnel tests of an aeromechanical gust-alleviation system using several different combinations of control surfaces
[NASA-TM-78638] p0253 N78-19059
The rotor systems research aircraft: A new step in the technology and rotor system verification cycle
p0263 N78-19144
Airplane design for gusts
p0267 N78-19717
Viscous flow simulation requirements
p0270 N78-19793
Subsonic roll damping of a model with swept-back and swept-forward wings
[NASA-TM-78677] p0299 N78-20061
Effect of winglets on a first-generation jet transport wing. 3: Pressure and spanwise load distributions for a semispan model at Mach 0.30
[NASA-TN-D-8478] p0299 N78-20063
Effect of winglets on a first-generation jet transport wing. 1: Longitudinal aerodynamic characteristics of a semispan model at subsonic speeds
[NASA-TN-D-8473] p0299 N78-20064
Effect of winglets on a first-generation jet transport wing. 2: Pressure and spanwise load distributions for a semispan model at high subsonic speeds
[NASA-TN-D-8474] p0299 N78-20065
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter configuration employing a jet sheet vortex generator
[NASA-TM-74049] p0300 N78-20071
Transonic static and dynamic stability characteristics of a finned projectile configuration
[NASA-TM-74058] p0300 N78-20072
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a model with swept back and swept forward wings
[NASA-TM-74093] p0300 N78-20073
Onset of condensation effects with a NACA 0012-64 airfoil tested in the Langley 0.3-meter cryogenic tunnel
[NASA-TM-78666] p0301 N78-20074
Theoretical analysis of aerodynamic characteristics of two helicopter rotor airfoils
[NASA-TM-78680] p0301 N78-20075
Simplified sonic-boom prediction
[NASA-TP-1122] p0301 N78-20078
Wind-tunnel investigation at Mach numbers from 1.90 to 2.86 of a canard-controlled missile with ram-air-jet spoiler roll control
[NASA-TP-1124] p0301 N78-20079
Effect of winglets on a first-generation jet transport wing. 5: Stability characteristics of a full-span wing with a generalized fuselage at high subsonic speeds
[NASA-TP-1163] p0302 N78-20081
Technical and economic evaluation of advanced air cargo systems
[NASA-TM-78672] p0305 N78-20108
Ground distance covered during airborne horizontal deceleration of an airplane
[NASA-TP-1157] p0306 N78-20115
A rotor-mounted digital instrumentation system for helicopter blade flight research measurements
[NASA-TP-1146] p0307 N78-20128
Simulator evaluation of a flight-path-angle control system for a transport airplane with direct lift control
[NASA-TP-1116] p0309 N78-20139
Study of the use of a nonlinear, rate-limited filter on pilot control signals
[NASA-TP-1147] p0309 N78-20142
Pilot-model analysis and simulation study of effect of control task desired control response
[NASA-TP-1140] p0309 N78-20143
TESTPLT: Interactive computer procedure for wind-tunnel-data management, retrieval, comparison, and plotting
[NASA-TM-78663] p0309 N78-20144
Investigation of a high speed data handling system for use with multispectral aircraft scanners
[NASA-TM-78689] p0310 N78-20481
Concorde noise-induced building vibrations, John F. Kennedy International Airport
[NASA-TM-78676] p0311 N78-20919
Subsonic longitudinal and lateral-directional static aerodynamic characteristics for a close-coupled wing-canard model in both swept back and swept forward configurations
[NASA-TM-74092] p0312 N78-21049
A vectorization of the Jameson-Caughey NYU transonic swept-wing computer program FLO-22-V1 for the STAR-100 computer
[NASA-TM-78665] p0312 N78-21050
Effect of leading-edge contour and vertical-tail configuration on the low-speed stability characteristics of a supersonic transport model having a highly-swept arrow wing
[NASA-TM-78683] p0312 N78-21051
Comparison of aerodynamic data measured in air and Freon-12 wind-tunnel test mediums
[NASA-TM-78671] p0312 N78-21052
Numerical study of transonic flow over oscillating airfoils using the full potential equation
[NASA-TP-1120] p0313 N78-21055
Results of a simulator test comparing two display concepts for piloted flight-path-angle control
[NASA-TM-78692] p0318 N78-21104
Rectangular capture area to circular combustor scramjet engine
[NASA-TM-78657] p0318 N78-21107
Correlation of laser velocimeter measurements over a wing with results of two prediction techniques
[NASA-TP-1168] p0325 N78-21410
Effects of stores on longitudinal aerodynamic characteristics of a fighter at supersonic speeds
[NASA-TP-1175] p0345 N78-22028
The promise of advanced technology for future air transports
[NASA-TM-78712] p0348 N78-22075
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] p0354 N78-22115
An approach to the determination of aircraft handling qualities using pilot transfer functions
p0356 N78-23018
Determination of optimal control using imbedding of the terminal conditions
p0357 N78-23029
Progress in supersonic cruise aircraft technology
[NASA-TM-78695] p0358 N78-23047

Experimental results of winglets on first, second, and third generation jet transports
[NASA-TM-72674] p0358 N78-23052
A computer program for calculating symmetrical aerodynamic characteristics and lateral-directional stability derivatives of wing-body combinations with blowing jets
[NASA-TM-78684] p0358 N78-23054
Flight experiments to improve terminal area operations
[NASA-TM-78685] p0359 N78-23070
Combustion of hydrogen in a two-dimensional duct with step fuel injectors
[NASA-TP-1159] p0362 N78-23093
Interaction between step fuel injectors on opposite walls in a supersonic combustor model
[NASA-TP-1174] p0362 N78-23094
Numerical design of streamlined tunnel walls for a two-dimensional transonic test
[NASA-TM-78641] p0364 N78-23105
Configuration heating for a hypersonic research airplane concept having a 70 deg swept double-delta wing
[NASA-TP-1143] p0366 N78-23389
Noise prediction technology for CTOL aircraft
[NASA-TM-78700] p0366 N78-23875
High frequency sound attenuation in short flow ducts
[NASA-TM-78708] p0366 N78-23876
Powered-Lift Aerodynamics and Acoustics
[NASA-SP-406] p0389 N78-24046
Upper-surface-blowing flow-turning performance
p0389 N78-24048
Results of static tests of a 1/4 scale model of the Boeing YC-14 powered-lift system
p0389 N78-24049
Summary of low-speed aerodynamic characteristics of upper-surface-blown jet-flap configurations
p0389 N78-24050
Application of powered-lift concepts for improved cruise efficiency of long-range aircraft
p0390 N78-24051
Comparison of aerodynamic theory and experiment for jet-flap wings
p0390 N78-24052
Some measurements of an EBF powered-lift wake
p0390 N78-24054
Aerodynamic characteristics in ground proximity
p0390 N78-24055
Distributed upper-surface blowing concept
p0390 N78-24056
Theoretical predictions of jet interaction effects for USB and OWB configurations
p0391 N78-24059
Measured and calculated steady aerodynamic loads on a large-scale upper-surface blown model
p0392 N78-24072
Acoustic-loads research for powered-lift configurations
p0392 N78-24073
Tabulated pressure measurements of a NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2634] p0393 N78-24077
Wind-tunnel investigation of basic aerodynamic characteristics of a supercritical-wing research airplane configuration
[NASA-TM-X-2470] p0393 N78-24078
Wind-tunnel measurements of aerodynamic load distribution on an NASA supercritical-wing research airplane configuration
[NASA-TM-X-2469] p0393 N78-24079
Aerodynamic characteristics of an NASA supercritical-wing research airplane model with and without fuselage area-rule additions at Mach 0.25 to 1.00
[NASA-TM-X-2633] p0393 N78-24080
Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] p0402 N78-24515
A distributed vortex method for computing the vortex field of a missile
[NASA-TP-1183] p0405 N78-25058
Aerodynamic characteristics at Mach number 0.2 of a wing-body concept for a hypersonic research airplane
[NASA-TP-1189] p0405 N78-25059
Effects of spanwise nozzle geometry and location on the longitudinal aerodynamic characteristics of a vectored-engine-over-wing configuration at subsonic speeds
[NASA-TP-1215] p0406 N78-25060
Preliminary analysis of hub and spoke air freight distribution system
[NASA-TM-72656] p0406 N78-25069
Preliminary study of a large span-distributed-load flying-wing cargo airplane concept
[NASA-TP-1158] p0407 N78-25079
Modal control theory and application to aircraft lateral handling qualities design
[NASA-TP-1234] p0410 N78-25101
Environmental effects on composites for aircraft
[NASA-TM-78716] p0410 N78-25135
Progress on coal-derived fuels for aviation systems
[NASA-TM-78696] p0412 N78-25545
Summary of NASA landing-gear research
[NASA-TM-78679] p0431 N78-26048
Recent flight test results using an electronic display format on the NASA B-737
p0432 N78-26063
Airline pilot scanning behavior during approaches and landing in a Boeing 737 simulator
p0432 N78-26064
Automatic flight performance of a transport airplane on complex microwave landing system paths
p0433 N78-26066
Experimental determination of the navigation error of the 4-D navigation, guidance, and control systems on the NASA B-737 airplane
p0433 N78-26071
Effect of twist and camber on the low-speed aerodynamic characteristics of a powered close-coupled wing-canard configuration
[NASA-TM-78722] p0437 N78-26096
Subsonic longitudinal and lateral-directional static aerodynamic characteristics of a general research fighter model employing a strake-wing concept
[NASA-TM-74071] p0437 N78-26103
Induced velocity field of a jet in a crossflow
[NASA-TP-1087] p0442 N78-26392
Light airplane crash tests at three flight-path angles
[NASA-TP-1210] p0445 N78-26494
A ring-source model for jet noise
[NASA-TM-73959] p0445 N78-26877
CTOL transport technology, 1978
[NASA-CP-2036-PT-1] p0446 N78-27046
Environmental effects on composites for aircraft
p0448 N78-27061
Advanced structural sizing methodology
p0448 N78-27064
Laminar flow control overview
p0448 N78-27066
Flight investigation of insect contamination and its alleviation
p0448 N78-27067
Development of advanced stability theory suction prediction techniques for laminar flow control
p0449 N78-27068
Design of a laminar-flow-control supercritical airfoil for a swept wing
p0449 N78-27069
Wind-tunnel investigation of effects of trailing-edge geometry on a NASA supercritical airfoil section
[NASA-TM-X-2336] p0450 N78-27079
Aerodynamic characteristics of a counter-rotating, coaxial, hingeless rotor helicopter model with auxiliary propulsion
[NASA-TM-78705] p0450 N78-27084
A brief survey of rotary wing induced-velocity theory
[NASA-TM-78741] p0450 N78-27085
The effect of landing system coverage and path geometry on lateral position errors at the runway threshold
[NASA-TM-78744] p0451 N78-27100
Ground-based and in-flight simulator studies of low-speed handling characteristics of two supersonic cruise transport concepts
[NASA-TP-1240] p0453 N78-27111

Longitudinal aerodynamic characteristics of a fighter model with a close-coupled canard at Mach numbers from 0.40 to 1.20
[NASA-TP-1206] p0456 N78-27136
Effects of errors on decoupled control systems
[NASA-TP-1184] p0456 N78-27138
Composite structures for commercial transport aircraft
[NASA-TM-78730] p0457 N78-27183
Prediction of aircraft sideline noise attenuation
[NASA-TM-78717] p0460 N78-27871
Effect of camber on the trimmed lift capability of a close-coupled canard-wing configuration
[NASA-TM-78686] p0487 N78-28052
An analysis of the gust-induced overspeed trends of helicopter rotors
[NASA-TP-1213] p0488 N78-28056
User's guide for a modular flutter analysis software system (fast version 1.0)
[NASA-TM-78720] p0492 N78-28101
A subjective field study of helicopter blade-slap noise
[NASA-TM-78758] p0494 N78-28680
CTOL Transport Technology, 1978
[NASA-CP-2036-PT-2] p0496 N78-29046
Advanced aerodynamics and active controls technology
p0496 N78-29047
Experimental results of winglets on first, second, and third generation jet transports
p0496 N78-29048
Summary of NASA landing-gear research
p0497 N78-29056
Noise prediction technology for CTOL aircraft
p0497 N78-29057
Flight experiments to improve terminal area operations
p0497 N78-29058
Progress on coal-derived fuels for aviation systems
p0497 N78-29063
Aerodynamic characteristics induced on a supercritical wing due to vectoring twin nozzles at Mach numbers from 0.40 to 0.95
[NASA-TM-78746] p0543 N78-30039
Wind-tunnel testing of VTOL and STOL aircraft
[NASA-TM-78750] p0543 N78-30040
Status of aerial applications research in the Langley vortex research facility and the Langley full-scale wind tunnel
[NASA-TM-78760] p0543 N78-30041
Shockless airfoils with thicknesses of 20.6 and 20.7 percent chord analytically designed for a Mach number of 0.68 and a lift coefficient of 0.40
[NASA-TM-X-73917] p0543 N78-30046
Static aerodynamic characteristics of a winged single-stage-to-orbit vehicle at Mach numbers from 0.3 to 4.63
[NASA-TP-1233] p0544 N78-30053
Approximate indicial lift function for tapered, swept wings in incompressible flow
[NASA-TP-1241] p0544 N78-30054
Theoretical estimation of the transonic aerodynamic characteristics of a supercritical-wing transport model with trailing-edge controls
[NASA-TP-1253] p0544 N78-30056
Description and performance of the Langley visual landing display system
[NASA-TM-78742] p0546 N78-30073
Flight demonstrations of curved, descending approaches and automatic landings using time referenced scanning beam guidance
[NASA-TM-78745] p0546 N78-30074
Stability and performance characteristics of a fixed arrow wing supersonic transport configuration (SCAT 15F-9898) at Mach numbers from 0.60 to 1.20
[NASA-TM-78726] p0547 N78-30087
Evaluation of several secondary tasks in the determination of permissible time delays in simulator visual and motion cues
[NASA-TP-1214] p0547 N78-30089
Simulator study of the effect of visual-motion time delays on pilot tracking performance with an audio side task
[NASA-TP-1216] p0547 N78-30090
Computer program for the design and off-design performance of turbojet and turbofan engine cycles
[NASA-TM-78653] p0551 N78-30122
Airplane stability calculations with a card programmable pocket calculator
[NASA-TM-78678] p0552 N78-30138
Simulation study of the oscillatory longitudinal motion of an airplane at the stall
[NASA-TP-1242] p0552 N78-30141
Experimental determination of the rattle of simple models
[NASA-TM-78756] p0555 N78-30291
Recent developments in analysis of crack propagation and fracture of practical materials
[NASA-TM-78766] p0556 N78-30606
Control-surface hinge-moment calculations for a high-aspect-ratio supercritical wing
[NASA-TM-78664] p0557 N78-31043
Analysis of stability contributions of high dihedral V-tails
[NASA-TM-78729] p0557 N78-31044
Aerodynamic characteristics of a hypersonic research airplane concept having a 70 deg swept double-delta wing at Mach number 0.2
[NASA-TP-1252] p0557 N78-31045
Simulation and flight evaluation of a head-up landing aid for general aviation
[NASA-TP-1276] p0562 N78-31101
Demonstration of aircraft wing/store flutter suppression systems
p0566 N78-31128
Comparison of wing-span averaging effects on lift, rolling moment, and bending moment for two span load distributions and for two turbulence representations
[NASA-TM-78699] p0604 N78-32046
Wind tunnel tests on a tail-less swept wing span-distributed cargo aircraft configuration
[NASA-TM-78767] p0604 N78-32048
Aerodynamic characteristics of a 1/4 scale powered helicopter model with a V-type empennage
[NASA-TM-74033] p0604 N78-32049
Aerodynamic characteristics of a fixed arrow-wing supersonic cruise aircraft at Mach numbers of 2.30, 2.70, and 2.95
[NASA-TM-78706] p0604 N78-32050
Development of a nonlinear switching function and its application to static lift characteristics of straight wings
[NASA-TM-78737] p0604 N78-32051
Wind-tunnel investigation at supersonic speeds of a canard-controlled missile with fixed and free-rolling tail fins
[NASA-TP-1316] p0606 N78-32067
A preliminary study of the benefits of flying by ground speed during final approach
[NASA-TM-78777] p0608 N78-32076
Supersonic transport
[NASA-CASE-LAR-11932-1] p0609 N78-32086
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] p0613 N78-32168
Inverse boundary-layer theory and comparison with experiment
[NASA-TP-1208] p0615 N78-32385
Independent power generator
[NASA-CASE-LAR-11208-1] p0617 N78-32539
Laboratory and community studies of aircraft noise effects
[NASA-TM-78776] p0618 N78-32815
Helicopter Acoustics
[NASA-CP-2052-PT-1] p0618 N78-32816
Helicopter noise research at the Langley V/STOL tunnel
p0619 N78-32826
Exploratory wind-tunnel investigation of the effect of the main rotor wake on tail rotor noise
p0620 N78-32827
Full-scale testing of an Ogee tip rotor
p0620 N78-32830
Aerodynamic load distributions at transonic speeds for a close-coupled wing-canard configuration: Tabulated pressure data
[NASA-TM-78780] p0622 N78-33045
Geometry requirements for unsteady aerodynamics in aeroelastic analysis and design
[NASA-TM-78781] p0622 N78-33046

Effects of wing leading-edge deflection on the low-speed aerodynamic characteristics of a low-aspect-ratio highly swept arrow-wing configuration
[NASA-TM-78787] p0622 N78-33047
Subsonic dynamic stability characteristics of two close-coupled canard-wing configurations
[NASA-TP-1291] p0622 N78-33050
Estimation of leading-edge thrust for supersonic wings of arbitrary planform
[NASA-TP-1270] p0623 N78-33051
Prospects for a civil/military transport aircraft
[NASA-TM-78724] p0623 N78-33060
Characteristics of future air cargo demand and impact on aircraft development: A report on the Cargo/Logistic Airlift Systems Study (CLASS) project
[NASA-TM-78774] p0624 N78-33061
Static pressure orifice system testing and apparatus
[NASA-CASE-LAR-12269-1] p0630 N78-33123
Impact tests on fibrous composite sandwich structures
[NASA-TM-78719] p0631 N78-33152
Quantitative mapping by remote sensing of an ocean acid-waste dump
[NASA-TP-1275] p0634 N78-33617
Engineering and Scientific Data Management
[NASA-CP-2055] p0635 N78-33776
Comparison of low-frequency noise levels of the Concorde supersonic transport with other commercial service airplanes
[NASA-TM-78736] p0635 N78-33873
Noise-induced building vibrations caused by concorde and conventional aircraft operations at Dulles and Kennedy International Airports
[NASA-TM-78769] p0635 N78-33874

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. LEWIS RESEARCH CENTER, CLEVELAND, OHIO.
Calculation of 3-dimensional choking mass flow in turbomachinery with 2-dimensional flow models
p0010 A78-12289
Review of experimental work on transonic flow in turbomachinery
p0012 A78-12312
A review of NASA's propulsion programs for civil aviation
[AIAA PAPER 78-43] p0157 A78-20651
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[AIAA PAPER 78-93] p0158 A78-20683
Development and test of an inlet and duct to provide airflow for a wing boundary layer control system
[AIAA PAPER 78-141] p0159 A78-20701
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
EBF noise suppression and aerodynamic penalties
[AIAA PAPER 78-240] p0162 A78-20763
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
Preliminary QCSEE program - Test results
[SAE PAPER 771008] p0181 A78-23840
The application of the Routh approximation method to turbofan engine models
p0183 A78-23891
Minimum-time acceleration of aircraft turbofan engines
p0183 A78-23892
Design of turbofan engine controls using output feedback regulator theory
p0184 A78-23907
Solution of transient optimization problems by using an algorithm based on nonlinear programming
p0184 A78-23909
Noise of deflectors used for flow attachment with STOL-OTW configurations
p0215 A78-24877
Combustor fluctuating pressure measurements in-engine and in a component test facility - A preliminary comparison
p0215 A78-24878
An empirical model for inverted-velocity-profile jet noise prediction
p0215 A78-24879
Effectiveness of an inlet flow turbulence control device to simulate flight fan noise in an anechoic chamber
p0215 A78-24880
The promise of eutectics for aircraft turbines
p0215 A78-24882
Output feedback regulator design for jet engine control systems
p0215 A78-24898
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
p0216 A78-24906
Progress in advanced high temperature turbine materials, coatings, and technology
p0216 A78-24910
Steady-state unbalance response of a three-disk flexible rotor on flexible, damped supports
p0275 A78-29326
'Chain pooling' model selection as developed for the statistical analysis of a rotor burst protection experiment
p0276 A78-29327
General aviation energy-conservation research programs at NASA-Lewis Research Center
p0276 A78-29330
Effect of airstream velocity on mean drop diameters of water sprays produced by pressure and air atomizing nozzles
p0329 A78-33111
Gas path sealing in turbine engines
p0330 A78-33218
Self-acting shaft seals
p0331 A78-33219
State-of-the-art of turbofan engine noise control
p0340 A78-35658
On the use of relative velocity exponents for jet engine exhaust noise
p0376 A78-37683
Acoustic evaluation of a novel swept-rotor fan
[AIAA PAPER 78-1121] p0420 A78-41831
A viscous-inviscid interactive compressor calculation
[AIAA PAPER 78-1140] p0421 A78-41843
Propulsion
p0461 A78-43360
Jet fuels from synthetic crudes
p0461 A78-43415
Design approaches to more energy efficient engines
[AIAA PAPER 78-931] p0462 A78-43504
General aviation internal combustion engine research programs at NASA-Lewis Research Center
[AIAA PAPER 78-932] p0462 A78-43505
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[AIAA PAPER 78-958] p0463 A78-43520
Design and preliminary results of a semitranspiration cooled /Lamilloy/ liner for a high-pressure high-temperature combustor
[AIAA PAPER 78-997] p0464 A78-43544
Combustor concepts for aircraft gas turbine low-power emissions reduction
[AIAA PAPER 78-999] p0465 A78-43546
Real time digital propulsion system simulation for manned flight simulators
[AIAA PAPER 78-927] p0474 A78-45095
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[AIAA PAPER 78-961] p0474 A78-45096
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
NASA/General Electric Engine Component Improvement Program
[AIAA PAPER 78-929] p0475 A78-45098
Reduction of aircraft gas turbine engine pollutant emissions - A status report
p0480 A78-45429
Methods for calculating the transonic boundary layer separation for V/STOL inlets at high incidence angles
[AIAA 78-1340] p0483 A78-46537
NASA engine system technology programs - An overview
[AIAA PAPER 78-928] p0519 A78-48452
Gas turbine engine emissions - Problems, progress and future
p0524 A78-49336
Reaction diffusion in the NiCrAl and CoCrAl systems

p0597 A78-53063
Atmospheric effects on inlets for supersonic cruise aircraft
[NASA-TM-X-73647] p0020 N78-10026
Concepts for the development of light-weight composite structures for rotor burst containment
p0026 N78-10084
Application of a flight-line disk crack detector to a small engine
p0027 N78-10088
Turbine disks for improved reliability
p0027 N78-10089
Evaluation of an F100 multivariable control using a real-time engine simulation
[NASA-TM-X-73648] p0028 N78-10097
The promise of eutectics for aircraft turbines
[NASA-TM-73714] p0028 N78-10098
Fuel combustor
[NASA-CASE-LEW-12137-1] p0031 N78-10224
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] p0032 N78-10468
Experimental performance of a 13.65-centimeter-tip-diameter tandem-bladed sweptback centrifugal compressor designed for a pressure ratio of 6
[NASA-TP-1091] p0032 N78-11002
Effect of coolant flow ejection on aerodynamic performance of low-aspect-ratio vanes. 2: Performance with coolant flow ejection at temperature ratios up to 2
[NASA-TP-1057] p0033 N78-11008
Aircraft engine emissions
[NASA-CP-2021] p0038 N78-11063
Emissions reduction technology program
p0039 N78-11065
Pollution reduction technology program for class T4(JT8D) engines
p0039 N78-11067
Summary of emissions reduction technology programs
p0039 N78-11071
Emissions control for ground power gas turbines
p0039 N78-11072
General aviation piston-engine exhaust emission reduction
p0040 N78-11073
Alternative fuels
p0040 N78-11074
Global atmospheric sampling program
p0040 N78-11076
Stratospheric cruise emission reduction program
p0040 N78-11077
Advanced low-NO(x) combustors for supersonic high-altitude gas turbines
p0040 N78-11078
Effect of endwall cooling on secondary flows in turbine stator vanes
p0041 N78-11098
Altitude test of several afterburner configurations on a turbofan engine with a hydrogen heater to simulate an elevated turbine discharge temperature
[NASA-TP-1068] p0041 N78-11106
Effect of fuel properties on performance of single aircraft turbojet combustor at simulated idle, cruise, and takeoff conditions
[NASA-TM-73780] p0097 N78-13056
Flight-effects on predicted fan fly-by noise
[NASA-TM-73798] p0098 N78-13060
An empirical model for inverted-velocity-profile jet noise prediction
[NASA-TM-73838] p0098 N78-13061
An overview of aerospace gas turbine technology of relevance to the development of the automotive gas turbine engine
[NASA-TM-73849] p0098 N78-13062
Mechanical characteristics of stability-bleed valves for a supersonic inlet
[NASA-TM-X-3483] p0098 N78-13063
Influence of oil-squeeze-film damping on steady-state response of flexible rotor operating to supercritical speeds
[NASA-TP-1094] p0098 N78-13064
Hydrocarbon group type determination in jet fuels by high performance liquid chromatography
[NASA-TM-73829] p0101 N78-13233
Design considerations in mechanical face seals for improved performance. 1: Basic configurations
[NASA-TM-73735] p0101 N78-13439
Noise of deflectors used for flow attachment with STOL-OTW configurations
[NASA-TM-73809] p0102 N78-13853
A parametric investigation of an existing supersonic relative tip speed propeller noise model
[NASA-TM-73816] p0102 N78-13854
Cold-air performance of a tip turbine designed to drive a lift fan
[NASA-TP-1126] p0146 N78-14993
Preliminary QCSEE program test results
[NASA-TM-73732] p0151 N78-15042
Computer program for calculation of a gas temperature profile by infrared emission: Absorption spectroscopy
[NASA-TM-73848] p0151 N78-15043
Temperature distributions and thermal stresses in a graded zirconia/metal gas path seal system for aircraft gas turbine engines
[NASA-TM-73818] p0151 N78-15044
EBF noise suppression and aerodynamic penalties
[NASA-TM-73823] p0155 N78-15852
Cold-air performance of a tip turbine designed to drive a lift fan. 3: Effect of simulated fan leakage on turbine performance
[NASA-TP-1109] p0194 N78-16001
Cold-air performance of free-power turbine designed for 112-kilowatt automotive gas-turbine engine. 1: Design Stator-vane-chord setting angle of 35 deg
[NASA-TP-1007] p0198 N78-16053
A review of NASA's propulsion programs for aviation
[NASA-TM-73831] p0199 N78-16055
Preliminary study of propulsion systems and airplane wing parameters for a US Navy subsonic V/STOL aircraft
[NASA-TM-73652] p0206 N78-17041
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] p0208 N78-17055
Ceramics in gas turbine: Powder and process characterization
[NASA-TM-73875] p0208 N78-17059
General aviation energy-conservation research programs at NASA-Lewis Research Center
[NASA-TM-73884] p0208 N78-17060
Alternative aircraft fuels
[NASA-TM-73836] p0212 N78-17229
Automated meteorological data from commercial aircraft via satellite: Present experience and future implications
[NASA-TM-73750] p0212 N78-17558
Bibliography of Lewis Research Center technical contributions announced in 1976
[NASA-TM-73860] p0213 N78-17921
Effect of design changes on aerodynamic and acoustic performance of translating-centerbody sonic inlets
[NASA-TP-1132] p0236 N78-17998
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] p0244 N78-18066
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] p0244 N78-18067
Predicted inlet gas temperatures for tungsten fiber reinforced superalloy turbine blades
[NASA-TM-73842] p0264 N78-19157
High temperature environmental effects on metals
[NASA-TM-73878] p0264 N78-19158
Jet aircraft hydrocarbon fuels technology
[NASA-CP-2033] p0266 N78-19325
Effect of cooling-hole geometry on aerodynamic performance of a film-cooled turbine vane tested with cold air in a two-dimensional cascade
[NASA-TP-1136] p0301 N78-20080
Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 4: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.076-centimeter-(0.030-inch-) diameter holes having streamwise ejection angles
[NASA-TP-1151] p0308 N78-20130
Simulated flight effects on noise characteristics of a fan inlet with high throat Mach number
[NASA-TP-1199] p0308 N78-20132

Two-dimensional cold-air cascade study of a film-cooled turbine stator blade. 5: Comparison of experimental and analytical aerodynamic results for blade with 12 rows of 0.038-centimeter-(0.015 inch) diameter coolant holes having streamwise ejection angles
[NASA-TP-1204] p0308 N78-20133
Gas path sealing in turbine engines
[NASA-TM-73890] p0318 N78-21109
Airflow and thrust calibration of an F100 engine, S/N P680059, at selected flight conditions
[NASA-TP-1069] p0318 N78-21112
Theoretical flow characteristics of inlets for tilting-nacelle VTOL aircraft
[NASA-TP-1205] p0318 N78-21114
Rolling-element fatigue life of AISI M-50 and 18-4-1 balls
[NASA-TP-1202] p0325 N78-21473
Reduction of aircraft gas turbine engine pollutant emissions
[NASA-TM-78870] p0351 N78-22098
Lean combustion limits of a confined premixed-prevaporized propane jet
[NASA-TM-78868] p0352 N78-22099
In-place recalibration technique applied to a capacitance-type system for measuring rotor blade tip clearance
[NASA-TP-1110] p0352 N78-22101
Normal shock and restart controls for a supersonic airbreathing propulsion system
p0357 N78-23023
Optimal control of a supersonic inlet to minimize frequency of inlet unstart
p0357 N78-23024
Supersonic through-flow fan engines for supersonic cruise aircraft
[NASA-TM-78889] p0361 N78-23088
Altitude calibration of an F100, S/N P680063, turbofan engine
[NASA-TP-1228] p0362 N78-23095
Effects of nozzle design and power on cruise drag for upper-surface-blowing aircraft
p0391 N78-24058
Analytical modeling of under-the-wing externally blown flap powered-lift noise
p0391 N78-24063
Overview of the QCSEE program
p0392 N78-24066
Acoustic design of the QCSEE propulsion systems
p0392 N78-24067
Inlet technology for powered-lift aircraft
p0392 N78-24069
Reverse-thrust technology for variable-pitch fan propulsion systems
p0392 N78-24070
On the use of relative velocity exponents for jet engine exhaust noise
[NASA-TM-78873] p0398 N78-24137
Design and preliminary results of a semitranspiration cooled (Lamilloy) liner for a high-pressure high-temperature combustor
[NASA-TM-78874] p0398 N78-24138
Impact of future fuel properties on aircraft engines and fuel systems
[NASA-TM-78866] p0401 N78-24369
Characteristics and combustion of future hydrocarbon fuels
[NASA-TM-78865] p0401 N78-24370
Acoustic evaluation of a novel swept-rotor fan
[NASA-TM-78878] p0403 N78-24897
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] p0408 N78-25089
Counter pumping debris excluder and separator
[NASA-CASE-LEW-11855-1] p0408 N78-25090
VSTOL tilt nacelle aerodynamics and its relation to fan blade stresses
[NASA-TM-78899] p0437 N78-26099
A viscous-inviscid interactive compressor calculations
[NASA-TM-78920] p0437 N78-26100
Combustor concepts for aircraft gas turbine low-power emissions reduction
[NASA-TM-78875] p0440 N78-26143
End-wall boundary layer prediction for axial compressors
[NASA-TM-78928] p0441 N78-26144
Liquid-cooling technology for gas turbines review and status
[NASA-TM-78906] p0441 N78-26145
Filtration effects on ball bearing life and condition in a contaminated lubricant
[NASA-TM-78907] p0442 N78-26446
Design and operating experience on the US Department of Energy experimental Mod-0 100-kW wind turbine
[NASA-TM-78915] p0445 N78-26552
ACEE propulsion overview
p0446 N78-27048
Status of advanced turboprop technology
p0447 N78-27055
Propulsion systems noise technology
p0447 N78-27056
Advanced materials research for long-haul aircraft turbine engines
p0447 N78-27057
Gas turbine engine emission reduction technology program
p0447 N78-27058
Impact of broad-specification fuels on future jet aircraft
p0448 N78-27059
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] p0454 N78-27122
Inlet-engine matching for SCAR including application of a bicone variable geometry inlet
[NASA-TM-78955] p0454 N78-27125
A computer program for full-coverage film-cooled blading analysis including the effects of a thermal barrier coating
[NASA-TM-78951] p0454 N78-27126
Fuel conservative aircraft engine technology
[NASA-TM-78962] p0454 N78-27127
Reverse-flow combustor for small gas turbines with pressure-atomizing fuel injectors
[NASA-TP-1260] p0455 N78-27130
Real time digital propulsion system simulation for manned flight simulators
[NASA-TM-78958] p0456 N78-27137
Investigation of means for perturbing the flow field in a supersonic wind tunnel
[NASA-TM-78954] p0456 N78-27142
Design of an air ejector for boundary-layer bleed of an acoustically treated turbofan engine inlet during ground testing
[NASA-TM-78917] p0456 N78-27143
Bibliography of Lewis Research Center technical publications announced in 1977
[NASA-TM-78918] p0496 N78-28986
Effect of air temperature and relative humidity at various fuel-air ratios on exhaust emissions on a per-mode basis of an AVCO Lycoming 0-320 diad light aircraft engine: Volume 1: Results and plotted data
[NASA-TM-73507-VOL-1] p0501 N78-29100
Rub tolerance evaluation of two sintered NiCrAl gas path seal materials
[NASA-TM-78967] p0503 N78-29215
Performance with and without inlet radial distortion of a transonic fan stage designed for reduced loading in the tip region
[NASA-TP-1294] p0545 N78-30057
Procedures for generation and reduction of linear models of a turbofan engine
[NASA-TP-1261] p0556 N78-30896
Simultaneous measurements of ozone outside and inside cabins of two B-747 airliners and a Gates learjet business jet
[NASA-TM-78983] p0558 N78-31061
Gas path seal
[NASA-CASE-LEW-12131-2] p0562 N78-31103
Wind tunnel evaluation of YF-12 inlet response to internal airflow disturbances with and without control
p0605 N78-32062
Redundant disc
[NASA-CASE-LEW-12496-1] p0627 N78-33101
Results and status of the NASA aircraft engine emission reduction technology programs
[NASA-TM-79009] p0627 N78-33102
Performance of a transonic fan stage designed for a low meridional velocity ratio
[NASA-TP-1298] p0628 N78-33107
Design and overall performance of four highly loaded, high speed inlet stages for an advanced high-pressure-ratio core compressor
[NASA-TP-1337] p0628 N78-33108

Design and performance of a 427-meter-per-second-tip-speed two-stage fan having a 2.40 pressure ratio
[NASA-TP-1314] p0628 N78-33109
DYGABCD: A program for calculating linear A, B, C, and D matrices from a nonlinear dynamic engine simulation
[NASA-TP-1295] p0628 N78-33110
An airborne meteorological data collection system using satellite relay (ASDAR)
[NASA-TM-78992] p0632 N78-33283
Ozone concentration in the cabin of a Gates learjet measured simultaneously with atmospheric ozone concentrations
[NASA-TP-1340] p0634 N78-33618
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. MARSHALL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.
Helicopter response in gusty winds about a building
p0055 A78-14954
Satellite images to aircraft in flight
p0056 A78-14982
Preliminary comparison of model and prototype wakes
[AIAA PAPER 78-254] p0162 A78-20774
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Wind shear modeling for aircraft hazard definition
[NASA-CR-155223] p0034 N78-11022
A technique for simulating turbulence for aerospace vehicle flight simulation studies
[NASA-TM-78141] p0079 N78-12014
Overview of NASA/Marshall Space Flight Center's program on knowledge of atmospheric processes
p0267 N78-19714
NASA's aviation safety research and technology program
p0268 N78-19719
Wind shear modeling for aircraft hazard definition
[NASA-TM-79523] p0451 N78-27093
Aerodynamic roll characteristics of a 0.00548 scale 146-inch solid rocket booster reentry configuration (MSFC Model Number 486) over a portion of the reentry flight regime in the NASA MSF 14-inch trisonic wind tunnel
[NASA-TM-78195] p0613 N78-32173
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. PASADENA OFFICE, CALIF.
Resolution enhanced sound detecting apparatus
[NASA-CASE-NPO-14134-1] p0271 N78-19898
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] p0402 N78-24391
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. WALLOPS STATION, WALLOPS ISLAND, VA.
Airborne Oceanographic Lidar System
p0053 A78-14878
Precision positional data of general aviation air traffic in terminal air space
[NASA-RP-1020] p0404 N78-25048
NATIONAL AEROSPACE LAB., AMSTERDAM (NETHERLANDS).
Application of failure analysis in aviation
[NLR-MP-77002-U] p0145 N78-14449
Exploratory investigation of decelerating approaches of a twin-engined jet transport. Volume 2: Moving-base simulation and comparison with related experiments
[NLR-TR-76150-U] p0155 N78-15859
Collection of supercritical aerofoils obtained with the NLR hodograph method
[NLR-TR-75115-U] p0237 N78-18009
PHAROS, processor for harmonic analysis of the response of oscillating surfaces
[NLR-MP-77012-U] p0238 N78-18019
Fatigue design of fighters; guidelines for obtaining and maintaining adequate fatigue performance of tactical aircraft: General survey
p0241 N78-18047
Fatigue load monitoring
p0242 N78-18052
Flight-path reconstruction of symmetric nonsteady flights
[NLR-TR-76133-U] p0243 N78-18056
Flight test of stick force stability in attitude-stabilized aircraft
[NLR-MP-77015-U] p0246 N78-18080
Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
[NLR-MP-76023-U] p0248 N78-18289
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
p0346 N78-22042
A non-stationary model for atmospheric turbulence patches for the prediction of aircraft design loads
[NLR-TR-76131-U] p0361 N78-23085
The ground-attack/penetration model: A Monte Carlo simulation model to assess the survivability and to evaluate tactics for low-altitude military missions in an environment of groundbased air defence systems
p0431 N78-26051
The analysis of operational mission execution: An assessment of low-altitude performance, navigation accuracy and weapon delivery performance
p0433 N78-26070
Prediction of operational combat performance
p0435 N78-26086
Evaluation of a method for the predicton of jet-airframe interference
[NLR-TR-76132-U] p0438 N78-26111
Unsteady airloads on an oscillating supercritical airfoil
[NLR-MP-77008-U] p0438 N78-26113
Preliminary investigation into the application of magnetic rubber inspection (M.R.I.)
[NLR-TR-76083-U] p0445 N78-26507
Design and analysis of a hodograph method for the calculation of supercritical shock-free aerofoils
[NLR-TR-77046-U] p0488 N78-28059
Airfoil design by the method of singularities via parametric optimization of geometrically constrained least squares object function
[NLR-TR-76139-U] p0491 N78-28087
Review of aeronautical fatigue investigations in the Netherlands during the period April 1975 to February 1977
[NLR-MP-77005-U] p0494 N78-28494
Effects of crack plane orientation transitions on flight simulation fatigue crack propagation in a high strength aluminum alloy (7050)
[NLR-TR-76130-U] p0494 N78-28495
Investigation of the unsteady airloads on wing-store configurations in subsonic flow
[NLR-MP-77025-U] p0498 N78-29073
Investigations of the transonic flow around oscillating airfoils
[NLR-TR-77090-U] p0498 N78-29074
Assessment of service load experience using AIDS-recorded data
[NLR-MP-77011-U] p0500 N78-29096
Compilation of test data from an investigation on the effect of environment on crack growth under flight-simulation loading
[NLR-TR-76096-U] p0556 N78-30620
NATIONAL AEROSPACE LAB., TOKYO (JAPAN).
Calculation of the lift of partially-stalled wings
[NAL-TR-498T] p0252 N78-19054
A high-pressure, sector-shaped model combustor test facility for development of turbofan engines
[NAL-TR-517] p0409 N78-25093
Acoustics and performance of high-speed, unequally spaced fan rotors
[NAL-TR-526] p0409 N78-25094
Relationship between scatter of fatigue life and S-N curve of 2024-T4 aircraft structural aluminum alloy specimens with a sharp notch (Kt equals 8.25) under a constant temperature and humidity condition
[NAL-TR-412T] p0411 N78-25453
NATIONAL AVIATION FACILITIES EXPERIMENTAL CENTER, ATLANTIC CITY, N. J.
A flight investigation of system accuracies and operational capabilities of a general aviation area navigation system
[AD-A042846/6] p0021 N78-10041
Test and evaluation of the Dallas/Fort Worth terminal communications switching system
[AD-A040665/2] p0032 N78-10343
Simulation model for air traffic control communications

[AD-A044256] p0037 N78-11045
Collision risk and economic benefit analysis of composite separation for the Central East Pacific track system
[AD-A044317] p0037 N78-11046
Full-scale aircraft crash tests of modified jet fuel
[AD-A043843] p0045 N78-11251
Beacon Collision Avoidance System (BCAS); active mode
[AD-A046757] p0139 N78-14028
Simulation tests of flight technical error in 2D/3D area navigation (RNAV) using a multiple waypoint RNAV system with and without a flight director system
[AD-A047246] p0195 N78-16029
Intermittent positive control. Phase 1: Operational test and evaluation
[AD-A047249] p0195 N78-16030
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
High-altitude area navigation (RNAV) enroute simulation
[AD-A049315] p0257 N78-19088
Derivation of groundspeed information from airborne Distance Measuring Equipment DME interrogators
[AD-A049277] p0257 N78-19089
Evaluation of a 100-watt elevated high-intensity runway edge light
[AD-A051651] p0400 N78-24153
Feasibility study for simulation of an airport tower control environment
[AD-A051174] p0400 N78-24154
Comparison of slant and runway visual range relationships for 100, 124, and 155 feet
[AD-A052870] p0452 N78-27103
Las Vegas graphic study
[AD-A052772] p0452 N78-27104
General aviation (FAR 23) cockpit standardization analysis
[AD-A052803] p0453 N78-27112
Satellite communications mode simulation tests for oceanic air traffic control
[AD-A052546] p0458 N78-27313
TRSB microwave landing system demonstration program at Cape May, New Jersey, USA
[AD-A054605] p0488 N78-28070
TRSB microwave landing system demonstration program at Buenos Aires, Argentina
[AD-A054451] p0489 N78-28071
TRSB microwave landing system demonstration program at Tegucigalpa, Honduras
[AD-A054452] p0489 N78-28072
TRSB microwave landing system demonstration program at Dakar, Senegal
[AD-A054645] p0489 N78-28073
TRSB microwave landing system demonstration program at Nairobi, Kenya
[AD-A054646] p0489 N78-28074
An evaluation of modified RNAV terminal procedures using a single-waypoint RNAV system
[AD-A054510] p0489 N78-28075
Tests of crash-resistant fuel system for general aviation
[AD-A054141] p0490 N78-28081
Head-up displays: A literature review and analysis with an annotated bibliography
[AD-A054246] p0491 N78-28092
TRSB microwave landing system demonstration program at Brussels, Belgium
[AD-A054298] p0546 N78-30075
A preliminary comparison of thermal decomposition products of aircraft interior materials using the National Bureau of Standards smoke chamber and the combustion tube furnace
[AD-A054811] p0547 N78-30088
TRSB microwave landing system demonstration program at John F. Kennedy International Airport, Long Island, New York, USA
[AD-A055447] p0559 N78-31070
TRSB microwave landing system demonstration program at Kristiansand, Norway
[AD-A055317] p0559 N78-31071
TRSB microwave landing system demonstration program at Charleroi, Belgium
[AD-A055920] p0559 N78-31072
Dulles control tower console design study
[AD-A056200] p0566 N78-31132
Test and evaluation of air/ground communications antennas
[AD-A056148] p0567 N78-31325
The analysis of National Transportation Safety Board small multiengine fixed-wing aircraft accident/incident reports for the potential presence of low-level wind shear
[AD-A056780] p0624 N78-33063
Vortex advisory system simulation of Chicago O'Hare Airport
[AD-A057112] p0625 N78-33069
TRSB microwave landing system demonstration program at Shiraz, Iran
[AD-A055526] p0625 N78-33071
Digitized radar data compressor
[AD-A057442] p0632 N78-33290
Two lightning-flash counter systems
[AD-A057369] p0634 N78-33655

NATIONAL BUREAU OF STANDARDS, WASHINGTON, D. C.
Studies of the flash fire potential of aircraft cabin interior materials
[AD-A048475] p0247 N78-18158
Time-dependent fire behavior of aircraft cabin materials
[AD-A050923] p0324 N78-21234
The macroscopic detection of corrosion in aluminum aircraft structures with thermal neutron beams and film imaging methods
[PB-277074/1] p0364 N78-23214
Problems in world-wide standardization of the units of height measurement
[AD-A051150] p0402 N78-24385
Problems in world-wide standardization of the units of altitude measurement
[PB-277982/5] p0454 N78-27119
Ignition of a liquid fuel under high intensity radiation
[AD-A054974] p0614 N78-32199

NATIONAL GAS TURBINE ESTABLISHMENT, FARNBOROUGH (ENGLAND).
Intake design for fighter aircraft
p0549 N78-30110

NATIONAL GAS TURBINE ESTABLISHMENT, PYESTOCK (ENGLAND).
The use of co-flowing airstreams for the simulation of flight effects on jet noise
[NGTE-R-345] p0046 N78-11802
Experimental evaluation of a transpiration cooled nozzle guide vane
p0320 N78-21131

NATIONAL MECHANICAL ENGINEERING RESEARCH INST., PRETORIA (SOUTH AFRICA).
Performance tests and design modifications of a Wankel type rotary combustion automobile engine in order to determine its suitability for aircraft application
[CSIR-ME-1521] p0409 N78-25095

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, BOULDER, COLO.
Flight tests of a simple airborne device for predicting clear air turbulence encounters
[AIAA 78-1375] p0485 A78-46560
Atmospheric pressure jumps measured with arrays of sensitive pressure sensors in the vicinity of Chicago's O'Hare International Airport
[PB-277518/7] p0356 N78-22551

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, ROCKVILLE, MD.
An overview of aviation weather services
p0267 N78-19715

NATIONAL PHYSICAL LAB., TEDDINGTON (ENGLAND).
The installation of a submillimetre Michelson interferometer into Canberra aircraft WE173
[NPL-QU-38] p0154 N78-15635
Noise from engine thrust reversal of landing aircraft
[NPL-AC-83] p0362 N78-23098
Practice and principle in environmental noise rating
[NPL-AC-81] p0367 N78-23885

NATIONAL SWEDISH ROAD AND TRAFFIC RESEARCH INST., LINKOEPING.
Rolling resistance of aircraft wheels in dry snow
[VTI-128] p0140 N78-14041

NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VA.
Parachutes and decelerators, volume 2. A

bibliography with abstracts
[NTIS/PS-78/0320] p0406 N78-25067
Aircraft sonic boom: Effects on buildings. A bibliography with abstracts
[NTIS/PS-78/0239] p0410 N78-25099
Aircraft sonic boom: Studies on aircraft flight, aircraft design, and measurement. A bibliography with abstracts
[NTIS/PS-78/0238] p0410 N78-25100
Aerospace computer systems. Part 1: Avionics applications, volume 2. A bibliography with abstracts
[NTIS/PS-78/0289] p0412 N78-25787
Nonlinear acoustics. A bibliography with abstracts
[NTIS/PS-78/0240] p0412 N78-25840
Lighter than air vehicles. Citations from the NTIS data base
[NTIS/PS-78/0409/9] p0451 N78-27091
Flow visualization, volume 1. A bibliography with abstracts
[NTIS/PS-78/0425/5] p0458 N78-27379
Flow visualization, volume 2. A bibliography with abstracts
[NTIS/PS-78/0426/3] p0459 N78-27380
Airport development: Social and economic effects. A bibliography with abstracts
[NTIS/PS-78/0447/9] p0503 N78-29114
Lighter than air vehicles. Citations from the engineering index data base
[NTIS/PS-78/0410/7] p0607 N78-32073
Air traffic congestion and capacity. A bibliography with abstracts
[NTIS/PS-78/0598/9] p0609 N78-32085
Air pollution emission factors: A bibliography with abstracts
[NTIS/PS-78/0548/4] p0617 N78-32604
Bird strikes and aviation safety. A bibliography with abstracts
[NTIS/PS-78/0694/6] p0624 N78-33066
Closed loop control systems. Part 1: Aircraft. A bibliography with abstracts
[NTIS/PS-78/0809/0] p0630 N78-33122
Closed loop control systems. Part 2: Miscellaneous applications. A bibliography with abstracts
[NTIS/PS-78/0810/8] p0632 N78-33278
Fuel consumption: Transportation, volume 1. A bibliography with abstracts
[NTIS/PS-78/0707/6] p0633 N78-33599
Fuel consumption: Transportation, volume 2. A bibliography with abstracts
[NTIS/PS-78/0708/4] p0634 N78-33600
Urban noise pollution. A bibliography with abstracts
[NTIS/PS-78/0686/2] p0634 N78-33634
Airport noise. A bibliography with abstracts
[NTIS/PS-78/0807/4] p0634 N78-33639
Fiber optics, volume 2. Citations from the NTIS data base
[NTIS/PS-78/0713/4] p0636 N78-33918
NATIONAL TRANSPORTATION SAFETY BOARD, WASHINGTON, D. C.
Aircraft accident report: Knob Hill, Inc., Cessna-421, N999MB, Nogales, Arizona, 22 January 1977
[NTISUB/C/104-011] p0256 N78-19086
Aircraft accident report: Texas International Airlines, Inc., Douglas DC-9-14, N9104, Stapleton International Airport, Denver, Colorado, 16 November 1976
[NTISUB/C/104-010] p0257 N78-19087
Special study: Emergency locator transmitters, an overview
[NTSB-AAS-78-1] p0314 N78-21063
Aircraft accident report: Southern Airways Inc., DC-9-31, N1335U, New Hope, Georgia, April 4, 1977
[NTSB-AAR-78-3] p0314 N78-21064
Aircraft accident report: Commonwealth of Pennsylvania, Piper PA-31T, N631PT, Bressler, Pennsylvania, 14 February 1977
[NTISUB/D/104-001] p0451 N78-27095
Annual review of aircraft accident data, US general aviation, calendar year 1976
[PB-281330/1] p0624 N78-33064
Annual review of aircraft accident data, US air carrier operations, 1976
[PB-281329/3] p0624 N78-33065
NAVAL ACADEMY, ANNAPOLIS, MD.
Single bladed torqueless helicopter design
[AD-A045375] p0097 N78-13052
NAVAL AEROSPACE MEDICAL RESEARCH LAB., PENSACOLA, FLA.
Human factors engineering for head-up displays: A review of military specifications and recommendations for research
[AD-A056944] p0627 N78-33099
NAVAL AIR DEVELOPMENT CENTER, WARMINSTER, PA.
Ejection under deceleration
[AD-A046117] p0138 N78-14018
Development of a high temperature silicone base fire-resistant fluid for application in future military aircraft hydraulic system designs
[AD-A046828] p0153 N78-15287
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 30 June 1977
[AD-A047857] p0207 N78-17045
Accelerated laboratory corrosion test for materials and finishes used in naval aircraft
[AD-A048059] p0248 N78-18188
A-4F Blue Angel flight usage data, 1976
[AD-A050164] p0317 N78-21100
Evaluation of soil resistant coatings for exterior aircraft surfaces
[AD-A051449] p0365 N78-23235
Evaluation of a lip-seal hydraulic fitting for the F-14 aircraft
[AD-A051159] p0396 N78-24120
Powered inertia reel retraction during ejection
[AD-A054157] p0498 N78-29077
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 31 December 1977
[AD-A055672] p0562 N78-31098
V/STOL aerodynamic technology assessment
[AD-A054797] p0607 N78-32069
Galvanic corrosion fatigue testing of 7075-T6 aluminum bonded with graphite-epoxy composite
[AD-A055714] p0631 N78-33197
NAVAL AIR ENGINEERING CENTER, LAKEHURST, N.J.
Evaluation of the CVN 68/CVN 69 launching system
[AD-A049044] p0265 N78-19167
Technical data requirements for shipboard and shorebased vertical/short takeoff and landing V/STOL aircraft
[AD-A054102] p0500 N78-29093
Development of corrosion resistant fastening systems for aircraft carrier steam catapults
[AD-A053656] p0503 N78-29112
NAVAL AIR PROPULSION TEST CENTER, TRENTON, N.J.
Rotor burst protection program: Experimentation to provide guidelines for the design of turbine rotor burst fragment containment rings
p0026 N78-10077
Turbine engine diagnostics development report, phase 3
[AD-A044471] p0087 N78-12090
Evaluation of an automated smoke abatement system for jet engine test cells
[AD-A044587] p0089 N78-12107
Lubricity properties of high temperature jet fuel
[AD-A045467] p0101 N78-13235
Evaluation of the extended use of ferrocene for test cell smoke abatement engine and environmental test results
[AD-A047659] p0211 N78-17079
Effect of fuel bound nitrogen on oxides of nitrogen emission from a gas turbine engine
[AD-A048382] p0264 N78-19162
Effectiveness of the real time ferrograph and other oil monitors as related to oil filtration
[AD-A049334] p0308 N78-20134
Rotor burst protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in US commercial aviation during 1975
[NASA-CR-135304] p0563 N78-31105
NAVAL AIR SYSTEMS COMMAND, WASHINGTON, D. C.
Review of US Navy VSTOL handling qualities requirements
p0258 N78-19104
Requirements for VLA systems
p0260 N78-19118
NAVTOLAND and flying qualities
p0260 N78-19120

AV-8B composite wing government/industry briefing
p0396 N78-24113
Development of techniques and correlation of results to accurately establish the lift/drag characteristics of an air breathing missile from analytical predictions, sub-scale and full scale wind tunnel tests and flight tests
p0436 N78-26089
Analysis of advanced variable camber concepts
p0549 N78-30108
NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.
The numerical analysis of air combat engagements dominated by maneuvering performance
[AD-A042403] p0023 N78-10053
Shipboard testing of the AV-8A Harrier
p0259 N78-19108
Environmental requirements for simulated helicopter/VTOL operations from small ships and carriers
[AD-A053078] p0407 N78-25084
Aircraft engine driven accessory shaft coupling improvements using high-strength nonmetallic adapter/bushings
[AD-A053834] p0455 N78-27133
Maximum likelihood identification of the longitudinal aerodynamic coefficients of the EA-6B airplane in the catapult launch configuration
[AD-A054243] p0557 N78-31046
NAVAL AIR TEST FACILITY, LAKEHURST, N.J.
Deadload calibration program of CVN 68 catapult configuration
[AD-A042225] p0043 N78-11123
NAVAL AVIONICS FACILITY, INDIANAPOLIS, IND.
Fluid resistance testing of electrical wire used in aircraft and missiles, part 3
[AD-A045323] p0091 N78-12343
Performance evaluation of thin layer thermoelectric device
[AD-A045361] p0103 N78-13918
An industry survey on managing the timely introduction and utilization of large scale integrated circuits in military avionics
[AD-A053951] p0458 N78-27337
NAVAL CIVIL ENGINEERING LAB., PORT HUENEME, CALIF.
Porous friction surface runway at USNAS Dallas, Texas
[AD-A042181] p0043 N78-11124
Experimental relationships between moduli for soil layers beneath concrete pavements
[AD-A046239/0] p0200 N78-16068
Nansen-Drift Station Project: Remote sea-ice runway construction
[AD-A054720] p0503 N78-29113
NAVAL ELECTRONICS LAB. CENTER, SAN DIEGO, CALIF.
A-7 ALOFT economic analysis and EMI-EMP test results
p0202 N78-16816
NAVAL INTELLIGENCE SUPPORT CENTER, WASHINGTON, D. C.
The investigation of take-off and landing characteristics of jet shortened take-off and landing aircraft (STOL)
[AD-A044292] p0023 N78-10055
An approximate method of calculating downwash behind a straight wing with unsteady aperiodic motion at subsonic flight speeds
[AD-A044293] p0084 N78-12069
NAVAL OCEAN SYSTEMS CENTER, SAN DIEGO, CALIF.
Navigation performance of the Triscan concept for shipboard VTOL aircraft operations
[AIAA 78-1293] p0542 A78-50200
VTOL/Helicopter approach and landing guidance sensors for Navy ship applications
p0260 N78-19119
Covert communications between patrol aircraft in rendezvous: Millimetre-wave and electro-optical technologies compared with UHF link 4 for P-3 to P-3 hand-over in a maritime environment
[AD-A050771] p0355 N78-22285
Perspective radar display system: TV-like presentation on CRT provides higher lateral position and lateral motion sensitivity than a PPI
[AD-A052342] p0402 N78-24418
NAVAL POSTGRADUATE SCHOOL, MONTEREY, CALIF.
Design, construction and testing of a sub-scale turbojet test cell
[AD-A043005] p0044 N78-11126
Generalized helicopter rotor performance predictions
[AD-A046368] p0149 N78-15031
A state-of-the-art assessment of air data sensors for Naval aircraft
[AD-A046500] p0150 N78-15038
Effect of configuration variables on performance of solid fuel ramjets
[AD-A046786] p0151 N78-15050
Evaluation of and operational procedures for a helicopter simulation system utilizing an integrated electronic instrument display
[AD-A047166] p0200 N78-16069
An evaluation of the fidelity of motion simulators using a model of human dynamic orientation
[AD-A047120] p0201 N78-16071
A study of pull-through failures of mechanically fastened joints
[AD-A047142] p0202 N78-16372
Circulation control airfoil study
[AD-A048677] p0237 N78-18005
A comparison of integrated and conventional cockpit warning systems
[AD-A048670] p0239 N78-18022
LASTOP: A computer code for laser turrets optimization of small perturbation turrets in subsonic or supersonic flow
[AD-A049272] p0255 N78-19076
Proceedings of the Navy/NASA VSTOL Flying Qualities
[NASA-CR-155810] p0258 N78-19099
A summary of ship deck motion dynamics as applied to VSTOL aircraft
p0260 N78-19116
The feasibility of the jet-flap rotor as a lift generator for vertical takeoff and landing aircraft
[AD-A050214] p0307 N78-20125
A life cycle cost study of contractor versus organic support of aircraft programs
[AD-A049438] p0312 N78-21045
Unsteady, surface pressure and near-wave hotwire measurements of a circulation control airfoil
[AD-A050025] p0313 N78-21061
Report on aircraft fatigue studies
[AD-A049876] p0317 N78-21102
A sub-scale turbojet test cell for design evaluations and analytical model validation
[AD-A049862] p0324 N78-21166
Design and construction of a flight monitor and data recorder
[AD-A052405] p0398 N78-24135
An experimental study to determine the reduction in ultimate bending moment of a composite plate due to an internal delamination
[AD-A052662] p0411 N78-25466
Combustor design and operation for a sub-scale turbojet test cell
[AD-A053791] p0455 N78-27134
Fatigue crack propagation analysis of aircraft structures
[AD-A053835] p0459 N78-27456
A validation of mathematical models for turbojet test cells
[AD-A055991] p0611 N78-32101
Stress analysis of ceramic gas turbine blades by the finite element method, part 2
[AD-A055538] p0611 N78-32102
A study of alternatives for VSTOL computer systems
[AD-A056105] p0627 N78-33098
Stress analysis of ceramic turbine blades by finite element method, part 1
[AD-A056310] p0629 N78-33111
NAVAL RESEARCH LAB., WASHINGTON, D. C.
A study of the P-3C Omega navigation system
[AD-A044474] p0084 N78-12064
Design study of a centerplate mount for wind tunnel models
[AD-A047204] p0201 N78-16073
Numerical parametric stress analysis of the TF-30 turbine engine third-stage fan-blade/disk dovetail region
[AD-A051299] p0399 N78-24143
Electrostatic charging of JP-4 fuel on polyurethane foams
[AD-A053831] p0457 N78-27278
High performance composites and adhesives for V/STOL aircraft

[AD-A054637] p0503 N78-29154
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER, BETHESDA, MD.
An assessment of circulation control airfoil development
[AD-A043826] p0033 N78-11012
The XBQM-108A vertical attitude takeoff and landing vehicle
[AD-A044754] p0085 N78-12074
Circulation control: An updated bibliography of DTNSRDC research and selected outside references
[AD-A044762] p0090 N78-12251
Evaluation of a power-augmented-ram wing operating free in heave and pitch over water
[AD-A045428] p0093 N78-13021
Ride characteristics of catamaran sea loiter aircraft in a seaway
[AD-A045363] p0096 N78-13048
Static stability derivatives in pitch and roll of a model circulation control rotor
[AD-A046710] p0148 N78-15010
Theoretical aspects of dromedaryfoil
[AD-A047150] p0194 N78-16023
Drag, flow transition, and laminar separation on nine bodies of revolution having different forebody shapes
[AD-A048274] p0236 N78-18001
Parametric transonic evaluation of type A VSTOL nacelle drag
[AD-A048110] p0236 N78-18002
Naval Emergency Air Cargo Delivery System (NEACDS) feasibility tests and evaluation
[AD-A048988] p0256 N78-19085
Analysis of empirically determined aerodynamic and ram coefficients for a power-augmented-ram wing-in-ground effect
[AD-A049636] p0302 N78-20087
Effect of turbulent jet mixing on the static lift performance of a power augmented ram wing
[AD-A049620] p0313 N78-21060
The effects of cam and nozzle configurations on the performance of a circulation control rotor pneumatic valving system
[AD-A050494] p0352 N78-22103
The performance of a conceptual multimission power-augmented-ram wing-in-ground effect vehicle
[AD-A051433] p0359 N78-23064
Two-dimensional subsonic wind tunnel evaluation of two related cambered 15-percent thick circulation control airfoils
[AD-A055140] p0558 N78-31047
Aircraft configurations for high-speed ships
[AD-A055540] p0610 N78-32092
Potential acoustic benefits of circulation control rotors
p0619 N78-32825
Assessment of load alleviation devices installed on a power-augmented-ram wing over irregular waves
[AD-A045425] p0622 N78-33049
NAVAL SURFACE WEAPONS CENTER, DAHLGREN, VA.
Subsonic wind tunnel tests of a canard-control missile configuration in pure rolling motion
[AD-A044957] p0082 N78-12046
Nonlinear rolling motion analysis of a Canard-controlled missile configuration at angles of attack from 0 to 30 degrees in incompressible flow
[AD-A056695] p0631 N78-33132
NAVAL TEST PILOT SCHOOL, PATUXENT RIVER, MD.
Fixed wing stability and control, theory and flight test techniques
[AD-A051864] p0363 N78-23101
NAVAL TRAINING EQUIPMENT CENTER, ORLANDO, FLA.
Computer system requirements analysis device 2F112, F-14 weapon system trainer
[AD-A043578] p0031 N78-10126
NAVAL WEAPONS CENTER, CHINA LAKE, CALIF.
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
NAVAL WEAPONS SUPPORT CENTER, CRANE, IND.
Sensitivity of the Shoe-Box in P001 analysis
[AD-A043707] p0038 N78-11055
Engineering evaluation tests of 20-ampere airborne battery charger (breadboard) manufactured by Sunstrand Corporation
[AD-A045011] p0090 N78-12342
An examination of selected digital flight generators
[AD-A047845] p0212 N78-17084
NEILSEN ENGINEERING AND RESEARCH, INC., MOUNTAIN VIEW, CALIF.
Calculation of the longitudinal aerodynamic characteristics of upper-surface-blown wing-flap configurations
[NASA-CR-3004] p0544 N78-30050
NEVADA UNIV., LAS VEGAS.
Unsteady two dimensional airloads acting on oscillating thin airfoils in subsonic ventilated wind tunnels
[NASA-CR-2967] p0313 N78-21059
NEW MEXICO UNIV., ALBUQUERQUE.
Methodology for determining, isolating, and correcting runway roughness
[AD-A044328/3] p0099 N78-13078
NEW YORK UNIV., N. Y.
Calculation of transonic potential flowfields about complex, three-dimensional configurations
p0011 A78-12300
Supercritical cascade design
p0012 A78-12302
Supercritical wing sections III
p0341 A78-35728
Numerical calculation of transonic flow past a swept wing by a finite volume method
[NASA-CR-157012] p0403 N78-24808
NIELSEN ENGINEERING AND RESEARCH, INC., MOUNTAIN VIEW, CALIF.
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Further studies of aerodynamic loads at spin entry
[AD-A047952] p0205 N78-17028
High angle canard missile test in the Ames 11-foot transonic wind tunnel
[NASA-CR-2993] p0405 N78-25057
Modifications and improvements in a structural optimization scheme based on an optimality criterion
[AD-A055941] p0609 N78-32088
Propagation of sound through a sheared flow
[NASA-CR-152196] p0636 N78-33876
NORDEN, NORWALK, CONN.
Standard electronic module radar cost analysis
[AD-A048207] p0249 N78-18319
NORTH AMERICAN WEATHER CONSULTANTS, GOLETA, CALIF.
Initial development of a tactical system for dispersing supercooled stratus
[AD-A056570] p0635 N78-33677
NORTH CAROLINA STATE UNIV., RALEIGH.
Effect of inlet distortion on performance of a compressor stage. Part 1. Pneumatic data
[AD-A046055] p0142 N78-14050
Lift hysteresis of an oscillating slender ellipse
[AD-A049343] p0255 N78-19073
Investigation of a wing-rotor interaction system for helicopters
[AD-A054093] p0548 N78-30092
NORTHROP CORP., HAWTHORNE, CALIF.
Some observations on the mechanism of aircraft wing rock
[AIAA PAPER 78-1456] p0511 A78-47907
Development and evaluation of methods of plane stress fracture analysis, part 2. Volume 2: Fracture resistance and material property characterization
[AD-A046180] p0154 N78-15521
A non-Gaussian gust model for aircraft response analysis
[NOR-76-223] p0265 N78-19165
Flight control system design for ride qualities of highly maneuverable fighter aircraft
p0431 N78-26054
YF-17 full scale minimum drag prediction
p0436 N78-26091
Aerodynamic characteristics of a jet sheet vortex generator
[NASA-CR-158904] p0487 N78-28054
Weldbraze airframe components
[AD-A054042] p0504 N78-29457
NORTHWESTERN UNIV., EVANSTON, ILL.
Genesis N + 1: The origins of the turbo-jet revolution

p0252 N78-19047
Factors affecting the retirement of commercial transport jet aircraft
[NASA-CR-152115] p0316 N78-21092
NORTON CO., WORCESTER, MASS.
Ceramic composite protection for turbine disc bursts
p0026 N78-10083
NOTRE DAME UNIV., IND.
Application of polynomial techniques to multivariable control of jet engines
p0073 A78-16327
Frequency domain compensation of a DYNGEN turbofan engine model
p0183 A78-23890
Hierarchy of simulation models for a turbofan gas engine
p0428 A78-43055
Alternatives for jet engine control
[NASA-CR-157578] p0563 N78-31107

O

OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, LECLERC (FRANCE).
Prediction of aerodynamic characteristics of an aircraft from a correlation of results on a calibration model tested in various large transonic tunnels
p0436 N78-26088
OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, PARIS (FRANCE).
ONERA aerodynamic research work on helicopters
p0264 N78-19148
New materials for high temperature turbines: ONERA's DS composites confronted with the blade problems
p0321 N78-21139
Protection of cooled blades of complex internal structure
p0321 N78-21141
Measuring techniques in high temperature turbines
p0322 N78-21151
New computation method of turbine blades film cooling efficiency
p0322 N78-21154
OFFICE OF AIR FORCE HISTORY, WASHINGTON, D. C.
Encyclopedia of US Air Force aircraft and missile systems. Volume 1: Post-World War II fighters 1945 - 1973
[AD-A057002] p0622 N78-33036
OFFICE OF TELECOMMUNICATIONS, ANNAPOLIS, MD.
Air Traffic Control Radar Beacon System (ATCRBS) interference investigation in Los Angeles area
[PB-270944/2] p0094 N78-13035
OHIO STATE UNIV., COLUMBUS.
The exact numerical calculation of propeller noise
[AIAA PAPER 78-1122] p0420 A78-41832
Volumetric pattern analysis of airborne antennas
p0524 A78-49427
The helicopter route selection model (DYNFLITE)
[AD-A045094] p0096 N78-13047
The influence of transpiration cooling on turbine blade boundary layer
p0320 N78-21130
Advanced two-phase investigation in an erosion-ablation facility including flow diagnostics
[AD-A053809] p0450 N78-27089
Forced vibration of thin elastic shells with application to fractional horsepower hermetic refrigeration compressor shells
p0616 N78-32457
Near field pattern computations for airborne antennas
[AD-A057244] p0632 N78-33311
OHIO UNIV., ATHENS.
Instrument landing system improvement program: Far-field monitoring
[AD-A042320/2] p0024 N78-10063
Stand-alone development system using a KIM-1 microcomputer module
[NASA-CR-156067] p0303 N78-20100
Phase-locked tracking loops for LORAN-C
[NASA-CR-157582] p0558 N78-31068
OKLAHOMA STATE UNIV., STILLWATER.
An analytical and experimental study of the dynamic response of a semi-monocoque aircraft wing structure
p0348 N78-22072
OKLAHOMA UNIV., NORMAN.
Effect of wind turbulence and shear on landing performance of jet transports
[AIAA PAPER 78-249] p0162 A78-20771
Dynamical model of gust front
[PB-283425/7] p0635 N78-33692
OLD DOMINION UNIV., NORFOLK, VA.
Analysis of spread multi-jet VTOL aircraft in hover
[NASA-CR-155582] p0197 N78-16046
Experimental investigation of effect of jet decay rate on jet-induced pressures on a flat plate
[NASA-CR-2979] p0317 N78-21096
OLD DOMINION UNIV. RESEARCH FOUNDATION, NORFOLK, VA.
Side-force alleviation on slender, pointed forebodies at high angles of attack
[AIAA 78-1339] p0483 A78-46536
ONYX CORP., BETHESDA, MD.
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 1: Unconstrained forecasts of microcomputer technology
[AD-A046217] p0154 N78-15712
The impact of microcomputers on aviation: A technology forecasting and assessment study. Volume 2: Constrained forecasts and assessment of microcomputer technology
[AD-A046218] p0154 N78-15713
OREGON STATE UNIV., CORVALLIS.
A study of the effect of the rotor coil couplings of a synchronous machine on its predicted transient response
p0632 N78-33330
OWEN (F. K.), PALO ALTO, CALIF.
Measurements of unsteady vortex flow fields
[AIAA PAPER 78-18] p0171 A78-22554
Wake vortex measurements of bodies at high angle of attack
[AIAA PAPER 78-23] p0171 A78-22555
OXFORD UNIV. (ENGLAND).
The 4m x 2m industrial aerodynamics wind tunnel
[OUEL-1188/77] p0100 N78-13085

P

PAYNE, INC., ANNAPOLIS, MD.
Development of an ultra high level airdrop container concept
[AD-A046156] p0138 N78-14017
PENNSYLVANIA STATE UNIV., MIDDLETOWN.
Slotted test section dynamics of the NTF
[NASA-CR-155266] p0089 N78-12106
PENNSYLVANIA STATE UNIV., UNIVERSITY PARK.
Characteristics of the near wake of a compressor or fan rotor blade
[AIAA PAPER 78-1141] p0421 A78-41844
Flow measurements behind a rotor operating in a boundary layer
[AD-A046359] p0148 N78-15012
Compressor and fan wake characteristics
[NASA-CR-155766] p0235 N78-17995
Investigation of the unsteady pressure distribution on the blades of an axial flow fan
[NASA-CR-155771] p0244 N78-18068
Research on the statically thrusting propeller
[NASA-CR-157214] p0409 N78-25092
PENNWALT CORP., KING OF PRUSSIA, PA.
The application of ultraviolet cure resins for repair of composites
[AD-A055731] p0614 N78-32273
Piezoelectric polymer transducers for detection of structural defects in aircraft
[AD-A055729] p0621 N78-32903
PISA UNIV. (ITALY).
Calculation of temperature distribution in disks and cooling flow in a transient state
p0323 N78-21157
The currents absorbed by the motor with double rotor casing during operation expressed by means of parameters to be determined experimentally
[REPT-1600] p0366 N78-23345
POITIERS UNIV. (FRANCE).
Turbulent supersonic wakes
[AAAF-NT-77-06] p0034 N78-11018
POLISH ACADEMY OF SCIENCES, WARSAW.
Aerodynamic interference in a system of two

harmonically oscillating airfoils and its influence on flutter
p0019 N78-10016

POLITECNICO DI TORINO (ITALY).
Critical review of various structural safety concepts taking into account NDI methods
p0443 N78-26462

POLYTECHNIC INST. OF NEW YORK.
A finite-step method for estimating the spanwise lift distribution of wings in symmetric, yawed, and rotary flight at low speeds
[NASA-CR-158901] p0405 N78-25056
Slender body theory programmed for bodies with arbitrary cross section
[NASA-CR-145383] p0437 N78-26102

PRATT AND WHITNEY AIRCRAFT, EAST HARTFORD, CONN.
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel. Comprehensive data report
[NASA-CR-135238] p0235 N78-17991
CAD/CAM data management needs, requirements and options
p0635 N78-33778

PRATT AND WHITNEY AIRCRAFT, WEST PALM BEACH, FLA.
Application of fracture mechanics at elevated temperatures
[AD-A044239] p0042 N78-11113
Cumulative damage fracture mechanics at elevated temperatures
[AD-A044420] p0088 N78-12092
Analytical study of thermal barrier coated first-stage blades in an F100 engine
[NASA-CR-135359] p0208 N78-17058

PRATT AND WHITNEY AIRCRAFT GROUP, EAST HARTFORD, CONN.
Friction and wear of sintered fibermetal abradable seal materials
p0178 A78-23451
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
Lightweight engine containment
p0026 N78-10080
Design of rotors for improved structural life
p0027 N78-10085
Advanced supersonic propulsion study, phase 4
[NASA-CR-135273] p0038 N78-11062
NASA/Pratt and Whitney experimental clean combustor program: Engine test results
p0039 N78-11068
Process and metallurgical factors in joining superalloys and other high service temperature materials
p0046 N78-11393
Engineering summary of powerplant icing technical data
[AD-A045087] p0087 N78-12087
Study to improve turbine engine rotor blade containment
[AD-A045314] p0087 N78-12088
High frequency dynamic engine simulation
[NASA-CR-135313] p0097 N78-13059
Experimental clean combustor program: Turbulence characteristics of compressor discharge flows
[NASA-CR-135277] p0150 N78-15041
An analytical study of thermal barrier coated first stage blades in a JT9D engine
[NASA-CR-135360] p0198 N78-16054
Method of fan sound mode structure determination
[NASA-CR-135293] p0209 N78-17064
Method of fan sound mode structure determination computer program user's manual: Microphone location program
[NASA-CR-135294] p0209 N78-17065
Method of fan sound mode structure determination computer program user's manual: Modal calculation program
[NASA-CR-135295] p0209 N78-17066
Mean velocity, turbulence intensity and turbulence convection velocity measurements for a convergent nozzle in a free jet wind tunnel
[NASA-CR-2949] p0313 N78-21058
F100(3) parallel compressor computer code and user's manual
[NASA-CR-135388] p0351 N78-22096
JT9D jet engine performance deterioration
p0446 N78-27050
Engine component improvement: JT8D and JT9D performance improvements
p0447 N78-27052
Energy efficient engine: Preliminary design and integration studies
p0447 N78-27053
Fabrication and test of digital output interface devices for gas turbine electronic controls
[NASA-CR-135427] p0455 N78-27129
Effect of steady flight loads on JT9D-7 performance deterioration
[NASA-CR-135407] p0501 N78-29105
Short-term performance deterioration in JT9D-7A(SP) engine 695743
[NASA-CR-135431] p0551 N78-30121
Compressor seal rub energetics study
[NASA-CR-159424] p0610 N78-32096
Flight effects on the aerodynamic and acoustic characteristics of inverted profile coannular nozzles
[NASA-CR-3018] p0621 N78-32836

PRATT AND WHITNEY AIRCRAFT GROUP, MIDDLETOWN, CONN.
NDE: A key to engine rotor life prediction
p0027 N78-10087

PRATT AND WHITNEY AIRCRAFT GROUP, WEST PALM BEACH, FLA.
Design and verification of a turbofan swirl augmentor
[AIAA PAPER 78-1040] p0465 A78-43568
Evaluation of a low aspect ratio small axial compressor stage, volume 1
[NASA-CR-135240] p0086 N78-12081
Evaluation of a low aspect ratio small axial compressor stage, volume 2
[NASA-CR-135241] p0086 N78-12082
Reliability prediction for combustors and turbines, volume 1
[AD-A045670] p0101 N78-13446
F-15/nonaxisymmetric nozzle system integration study support program
[NASA-CR-135252] p0245 N78-18070
Trends of future turbine life prediction: Time phase automated analysis and test verification
p0321 N78-21143
Machine casting of high temperature alloys for turbine engine components
[AD-A050698] p0355 N78-22211
Development of mainshift high speed cylindrical roller bearings for gas turbine engines
[AD-A052351] p0402 N78-24556
Titanium damage tolerant design data for propulsion systems
[AD-A053252] p0442 N78-26202
Advanced optical blade tip clearance measurement system
[NASA-CR-159402] p0563 N78-31106
Radiographic examination of T55 engine
[AD-A055108] p0564 N78-31113
Titanium alloy ignition and combustion
[AD-A055443] p0614 N78-32235

PRINCETON UNIV., N. J.
Flying qualities of an aircraft with strong lateral-directional coupling
[AIAA 78-1361] p0484 A78-46550
Aerodynamic and hovering control of LTA vehicles
[AD-A045315] p0082 N78-12047
Effects of control and display parameters on piloted VTOL decelerating instrument approach
p0142 N78-14053
An experimental and analytical investigation of the hovering and forward flight characteristics of the aerocrane hybrid heavy lift vehicle
[AD-A049084] p0255 N78-19075
Optimal control theory (OWEN) applied to a helicopter in the hover and approach phase
[NASA-CR-152135] p0323 N78-21161
A helicopter simulator study of control display tradeoffs in a decelerating approach
[AD-A051242] p0364 N78-23109
Experimental investigation of aerodynamic characteristics of a tracked ram air cushion vehicle
[PB-277674] p0395 N78-24099
A study of the precision hover capabilities of the aerocrane hybrid heavy lift vehicles
[AD-A054281] p0548 N78-30091

The influence of throttle augmented stability (APCS) and short period control characteristics on the landing approach
[AD-A055892] p0565 N78-31123
PROPELLERWERK HOFFMANN G.M.B.H. U. CO. KG HOCO, ROSENHEIM (WEST GERMANY).
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
PROTOTYPE DEVELOPMENT ASSOCIATES, INC., SANTA ANA, CALIF.
Hardened reentry vehicle development program. Erosion-resistant nosetip technology
[AD-A056390] p0630 N78-33128
PURDUE RESEARCH FOUNDATION, LAFAYETTE, IND.
Microprocessor-controlled communications in air terminal navigation systems
[AD-A052819] p0458 N78-27311
PURDUE UNIV., LAFAYETTE, IND.
Effects of dynamic aeroelasticity on handling qualities and pilot rating
[AIAA 78-1365] p0484 A78-46554
Project SQUID
[AD-A047076] p0199 N78-16056
Analysis of single and double coverage aircraft multispectral scanner arrays for positional data
p0267 N78-19553
Proceedings of the Workshop on Engine-Airframe Integration Short-Haul Aircraft
[AD-A053417] p0499 N78-29088
Effects of dynamic aeroelasticity on handling qualities and pilot rating
p0560 N78-31084
The flow field calculation in supersonic mixed-compression aircraft inlets at angle of attack using the three-dimensional method of characteristics with discrete shock wave fitting
p0603 N78-32041
Analysis of a high speed ring valve system for a single cylinder reciprocating compressor
p0633 N78-33442

Q

QUEEN MARY COLL., LONDON (ENGLAND).
A mean camberline singularity method for two-dimensional steady and oscillatory aerofoils and control surfaces in inviscid incompressible flow
[ARC-CP-1391] p0545 N78-30066
Two-dimensional aerofoils and control surfaces in simple harmonic motion in incompressible inviscid flow
[ARC-CP-1392] p0545 N78-30068

R

R AND D ASSOCIATES, MARINA DEL REY, CALIF.
Aircraft response effect on E-field measurements
[AD-A047986] p0248 N78-18272
RADIO CORP. OF AMERICA, VAN NUYS, CALIF.
Bearing study program
[AD-A049767] p0314 N78-21068
RAMAN AERONAUTICS RESEARCH AND ENGINEERING, INC., PALO ALTO, CALIF.
An analysis of the rotor blade stresses of the three stage compressor of the Ames Research Center 11- by 11-foot transonic wind tunnel
[NASA-CR-152083] p0209 N78-17061
RAND CORP., SANTA MONICA, CALIF.
A critique of aircraft airframe cost models
[AD-A047181] p0198 N78-16048
Life-cycle analysis of aircraft turbine engines
[AD-A050349] p0308 N78-20135
The military utility of very large airplanes and alternative fuels
[AD-A053604] p0487 N78-28051
Estimated costs of extended low-rate airframe production
[AD-A054834] p0562 N78-31100
RAO AND ASSOCIATES, INC., PALO ALTO, CALIF.
Use of leaning vanes in a two stage fan
[NASA-CR-152134] p0319 N78-21115
RAYTHEON CO., SUDBURY, MASS.
A review of methodologies and concepts to measure and evaluate aircraft survivability/vulnerability
[AD-A050152] p0317 N78-21099
RCA GOVERNMENT AND COMMERCIAL SYSTEMS, BURLINGTON, MASS.
HHSD demonstration model development
[AD-A054437] p0551 N78-30120
RCA SERVICE CO., INC., SPRINGFIELD, VA.
Aircraft measurement of radio frequency noise at 121.5 MHz, 243MHz and 406MHz
p0385 A78-39105
RENSSELAER POLYTECHNIC INST., TROY, N. Y.
An implementable digital adaptive flight controller designed using stabilized single-stage algorithms
p0013 A78-12360
Wear studies on aircraft brake materials
p0177 A78-23433
Evaluation of aircraft brake materials
[ASLE PREPRINT 77-LC-6B-2] p0232 A78-28439
RESEARCH INST. FOR ENVIRONMENTAL HYGIENE, TNO, DELFT (NETHERLANDS).
Activities of the TNO Research Institute for Environmental Hygiene
p0046 N78-11536
RESEARCH TRIANGLE INST., RESEARCH TRIANGLE PARK, N. C.
Investigation of new techniques for aircraft navigation using the omega navigation
[NASA-CR-145303] p0206 N78-17037
General aviation avionics equipment maintenance
[NASA-CR-145342] p0398 N78-24132
AFAL simulation facility/capability manual. Volume 1: Executive summary and Systems Avionics Division
[AD-A055591] p0562 N78-31102
RHEIN-FLUGZEUGBAU G.M.B.H., MOENCHENGLADBACH (WEST GERMANY).
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
ROCKET RESEARCH CORP., REDMOND, WASH.
Hydrazine-fueled aircraft starter feasibility demonstration
[AD-A042463] p0042 N78-11107
ROCKWELL INTERNATIONAL CORP., CEDAR RAPIDS, IOWA.
A 4D approach control using VOR/DME/ILS guidance
p0315 N78-21083
ROCKWELL INTERNATIONAL CORP., COLUMBUS, OHIO.
RPV flying qualities design criteria
[AD-A045170] p0096 N78-13046
Static tests of a large scale swivel nozzle thrust deflector
[NASA-CR-152091] p0352 N78-22100
An investigation of corner separation within a thrust augmenter having Coanda jets
[AD-A052131] p0366 N78-23392
ROCKWELL INTERNATIONAL CORP., DOWNEY, CALIF.
Structural and assembly concepts for large erectable space systems
[AAS 77-205] p0371 A78-36706
ROCKWELL INTERNATIONAL CORP., LOS ANGELES, CALIF.
Canard configured aircraft with 2-D nozzle
[AIAA PAPER 78-1450] p0511 A78-47904
Lower cost by substituting steel for titanium. AF1410 steel-detail design and development tests
[AD-A046705] p0153 N78-15239
Study of hypersonic propulsion/airframe integration technology
[NASA-CR-145321] p0258 N78-19096
Fiber Optics Cost Analysis Program (FOCAP)
[AD-A049859] p0318 N78-21105
Aerodynamic preliminary analysis system. Part 2: User's manual and program description
[NASA-CR-145300] p0389 N78-24043
Preliminary design of low-cost titanium structure
[AD-A053327] p0408 N78-25087
Hazard assessment of aircraft gun compartments
[AD-A055026] p0558 N78-31064
ROCKWELL INTERNATIONAL CORP., THOUSAND OAKS, CALIF.
A computational model for three-dimensional incompressible small cross flow wall jets
[AD-A048450] p0237 N78-18008
ROHDE AND SCHWARTZ, MUNICH (WEST GERMANY).
UHF DF triangulation system for control and guidance of military aircraft
p0315 N78-21077
ROHR INDUSTRIES, INC., CHULA VISTA, CALIF.
Test and demonstration prototype tracked air cushion vehicle (PTACV): Phase IIIC
[PB-279970/8] p0557 N78-31007
ROLLS-ROYCE LTD., BRISTOL (ENGLAND).
Project optimisation of military gas turbines with respect to turbine life
p0319 N78-21120

ROLLS-ROYCE LTD., DERBY (ENGLAND).
Types of rotor failure and characteristics of fragments
p0025 N78-10073
Some practical limitations to fuel-conservative civil engine technology
[AAAP-NT-77-29] p0351 N78-22092
ROME AIR DEVELOPMENT CENTER, GRIFFISS AFB, N.Y.
FAA lightning protection study: Lightning protection requirements for Wilcox Mark I/D instrument landing system
[AD-A043907] p0036 N78-11044
Analysis and test of the reduced height performance of the AN/GRN-27 ILS system course and clearance near field detector antennas
[AD-A051456] p0360 N78-23075
ROME UNIV. (ITALY).
Use of simulation techniques in the problem of air traffic control
[QUAD-CALC-ELETT-21] p0395 N78-24111
ROYAL AIR FORCE, LONDON (ENGLAND).
Unfulfilled needs of non-destructive inspection of military aircraft
p0443 N78-26464
Aims and progress of a battle damage repair capability in the Royal air force
p0491 N78-28091
ROYAL AIRCRAFT ESTABLISHMENT, BEDFORD (ENGLAND).
Prediction of the severity of buffeting
p0249 N78-18382
The STO deck launch problem
p0259 N78-19107
A flight investigation of the spanwise lift requirements of a helicopter rotor blade
[ARC-R/M-3812] p0361 N78-23086
Measurements of control-surface oscillatory derivatives on a sweptback, tapered model wing in two transonic tunnels
[ARC-R/M-3806] p0363 N78-23104
Steep gradient approach systems research for all-weather operations
p0432 N78-26062
Prediction of the severity of buffeting
p0493 N78-28404
Flight measurements of the effects of simulated leading-edge erosion on helicopter blade stall, torsional loads and performance
[ARC-R/M-3809] p0548 N78-30098
ROYAL AIRCRAFT ESTABLISHMENT, FARNBOROUGH (ENGLAND).
An influence-coefficient approach to static aeroelastic problems and a comparison with experiments on a flexible wind-tunnel model
[ARC-CP-1379] p0093 N78-13024
The calibration of injector-powered engine simulators for use in pressurised wind tunnels
[ARC-CP-1377] p0100 N78-13084
Statistical and flight dynamic studies on conflict detection and resolution in civil aviation
[RAE-LIB-TRANS-1903] p0139 N78-14020
Icing problems on helicopter rotors
[BR59303] p0140 N78-14032
Low-speed wind-tunnel tests of the longitudinal stability characteristics of some swept-wing quiet Airbus configurations
[ARC-R/M-3801] p0141 N78-14042
Effects of heat on fatigue in aircraft structure
[ARC-R/M-3798] p0143 N78-14158
Fatigue strength of joints with special fasteners, part 2
[RAE-LIB-TRANS-1920] p0145 N78-14408
The effect of design and production parameters on the fatigue strength of joints
[RAE-LIB-TRANS-1921] p0145 N78-14409
Iterative calculation of subcritical flow around thick cambered wings: Direct and design problems
[RAE-TM-AERO-1709] p0148 N78-15017
An assessment of some forms of follower-tooth reduction gear and its application to helicopter main rotor gearboxes
[RAE-TR-77040] p0150 N78-15035
An introduction to the aerodynamics of flight dynamics
[RAE-TM-AERO-1710] p0152 N78-15057
Stress intensity factors for a cracked hole in a row of holes
[RAE-TR-77073] p0154 N78-15525
Influence of gust modelling on the identification of the derivatives of the longitudinal motion of an aircraft
[RAE-LIB-TRANS-1944] p0210 N78-17071
Current standards of fatigue test on strike aircraft
[AGARD-AR-92] p0242 N78-18051
Inviscid fluid models, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0249 N78-18384
Icing on helicopters
[RAE-LIB-TRANS-1911] p0257 N78-19095
The collection and analysis of fatigue damage occurring in aircraft in service
[RAE-LIB-TRANS-1934] p0349 N78-22077
Application to life prediction of design data derived from fatigue tests with service-like load sequences
[RAE-LIB-TRANS-1939] p0356 N78-22388
Theoretical determination of subsonic oscillatory airforce coefficients
[ARC-R/M-3804] p0359 N78-23067
Vortex breakdown. Some observations in flight on the HP 115 aircraft
[ARC-R/M-3805] p0359 N78-23068
Aircraft ride-bumpiness and the design of ride-smoothing systems
p0431 N78-26053
Performance implications of some recent advances in weapon carriage research
p0435 N78-26081
Compilation of measures to increase the fatigue strength of aircraft structures
[RAE-LIB-TRANS-1942] p0439 N78-26134
Non-destructive inspection of composite materials for aircraft structural applications
p0444 N78-26474
Inviscid fluid model, based on rolled-up vortex sheets, for three-dimensional separation at high Reynolds number
p0494 N78-28406
Determination of bending stresses in a spur gear tooth
[RAE-LIB-TRANS-1923] p0504 N78-29452
Diverse forms and derivations of the equations of motion of deformable aircraft and their mutual relationship
[RAE-TR-77077] p0548 N78-30097
A pyramid skewed axis sensor set for multiplex flight control systems
[ARC-R/M-3808] p0553 N78-30143
Technical evaluation of flying weapon systems
[RAE-LIB-TRANS-1948] p0560 N78-31087
ROYAL NETHERLANDS AIRCRAFT FACTORIES FOKKER, SCHIPHOL-OOST.
Generation and suppression of fan-compressor noise
[FOK-3-1823] p0353 N78-22107
A statistical test of the calculated mean fatigue life using service experience
[FOK-S-144] p0440 N78-26138
Adhesion of erosion resistant tapes on several surface configurations
[FOK-R-2132] p0442 N78-26220
Spacelab: Testing of Metalbond 328 WC and foam adhesive BSL 208/5
[FOK-R-2162] p0442 N78-26221
The resonance-impedance method as a means for quality control of advanced fibre reinforced plastic structures
p0444 N78-26475

S

SAAB-SCANIA, LINKOPING (SWEDEN).
On the detection and measurement of cracks in critically loaded holes
p0444 N78-26469
SACRAMENTO AIR LOGISTICS CENTER, MCCLELLAN AFB, CALIF.
F-111 depot fuselage fuel tank deseal/reseal procedures
[AD-A050819] p0349 N78-22078
SAN FRANCISCO UNIV., CALIF.
ALC/50/ values for some polymeric materials
p0371 A78-36596
SANDIA LABS., ALBUQUERQUE, N. MEX.
B77 flight test data processing
[SAND-77-8010] p0082 N78-12049

Digital spectral analysis and filtering of experimental aerodynamic data
[SAND-77-0225] p0093 N78-13022
Computer-controlled video instrumentation technique for wind tunnel testing of full-scale lifting parachutes
[SAND-77-1773C] p0457 N78-27145
Interaction of thick film dielectric, conductor, and alumina substrate for DCU201 aircraft controller
[SAND-78-0069] p0493 N78-28349
Analysis of the engine fragment threat and the crush environment for small packages carried on US commercial jet aircraft
[SAND-78-0244C] p0608 N78-32078
Hybrid computer study of the sensitivity of aircraft dynamics to aerodynamic cross-coupling
[SAND-77-1309C] p0630 N78-33121
SANDIA LABS., LIVERMORE, CALIF.
Graphics for the hybrid stores separation simulation of the B77 system
[SAND-78-8212] p0562 N78-31099
SANTA CLARA UNIV., CALIF.
Aircraft attitude measurement using a vector magnetometer
[NASA-CR-155565] p0207 N78-17050
Evaluation of STOL navigation avionics
[NASA-CR-155566] p0208 N78-17051
SCHOOL OF AEROSPACE MEDICINE, BROOKS AFB, TEX.
Organic compounds in turbine combustor exhaust
[AD-A045582] p0098 N78-13065
Optical evaluation of F/FB-111 field-service-test windshields
[AD-A046490] p0150 N78-15034
Multiple images in the F/FB-111 aircraft windshield: Their generation, spatial localization, and recording
[AD-A053470] p0490 N78-28084
SCIENCE APPLICATIONS, INC., SAN DIEGO, CALIF.
Mixing and combustion in high speed air flows
[AD-A054398] p0503 N78-29188
SCIENTIFIC SYSTEMS, INC., CAMBRIDGE, MASS.
Global stability and control analysis of aircraft at high angles-of-attack
[AD-A051850] p0363 N78-23103
SEMCOR, INC., MOORESTOWN, N. J.
The extension of GPMS architecture for the distribution of audio signals within Navy aircraft
[AD-A044739] p0090 N78-12299
SERV-AIR, INC., HOUSTON, TEX.
Stator rotor tools
[NASA-CASE-MSC-16000-1] p0402 N78-24544
SEVILLE RESEARCH CORP., PENSACOLA, FLA.
Some current problems in simulator design, testing and use
[AD-A043240] p0044 N78-11127
Some factors influencing Air Force simulator training effectiveness
[AD-A043239] p0044 N78-11128
SIKORSKY AIRCRAFT, STRATFORD, CONN.
The Sikorsky S-76 program
p0263 N78-19139
Oil-air mist lubrication for helicopter gearing
[NASA-CR-135081] p0407 N78-25080
SINGER CO., BINGHAMTON, N.Y.
Aviation wide-angle visual system (AWAVS). Trainer Design Report. Subsystem Design Report
[AD-A046699] p0152 N78-15061
SINGER CO., LITTLE FALLS, N. J.
New techniques for low cost strapdown inertial systems
p0315 N78-21073
SKF INDUSTRIES, INC., KING OF PRUSSIA, PA.
Emergency and microfog lubrication and cooling of bearings for Army helicopters
[NASA-CR-135195] p0459 N78-27429
SOCIETE BERTIN ET CIE, VILLEURBANNE (FRANCE).
Aerodynamic fluid-fiber interactions
[NT-77-CN-1] p0299 N78-20060
SOCIETE FRANCAISE D'EQUIPEMENTS POUR LA NAVIGATION AERIENNE, VELIZY-VILLACOUBLAY (FRANCE).
Equipment permitting fuel savings during approach
[AAAF-NT-77-27] p0397 N78-24130
SOCIETE NATIONALE D'ETUDE ET DE CONSTRUCTION DE MOTEURS D'AVIATION, PARIS (FRANCE).
Amelioration of various components of a subsonic transport aircraft engine
[AAAF-NT-77-31] p0353 N78-22109
SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE, LA COURNEUVE (FRANCE).
Technical and financial fall-out on armed forces from commercial and export helicopter programmes
p0264 N78-19150
SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE, PARIS (FRANCE).
The AS 350 light helicopter
p0263 N78-19140
A comparison of predictions obtained from wind tunnel tests and the results from cruising flight (Airbus and Concorde)
p0436 N78-26093
SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE, SURESNES (FRANCE).
Can fatigue cracks be detected in an early stage by acoustic emission? Application to high resistance light alloys used in aeronautics
[AAAF-NT-77-35] p0403 N78-24587
SOCIETE NATIONALE INDUSTRIELLE AEROSPATIALE, TOULOUSE (FRANCE).
Inertial smoothing and extrapolation of ILS beams: Application to the Airbus A 300 B
p0315 N78-21074
SOFTECH, INC., WALTHAM, MASS.
Operational Software Concept OSC executive evaluation/refinement
[AD-A055902] p0618 N78-32754
SOLAR TURBINES INTERNATIONAL, SAN DIEGO, CALIF.
Wide range operation of advanced low NOx combustors for supersonic high-altitude aircraft gas turbines
[NASA-CR-135297] p0141 N78-14047
SOUTHAMPTON UNIV. (ENGLAND).
Self streamlining wind tunnel: Low speed testing and transonic test section design
[NASA-CR-145257] p0099 N78-13076
The 0.1m subsonic cryogenic tunnel at the University of Southampton
[NASA-CR-145305] p0247 N78-18086
Jet noise modelling by geometric acoustics. Part 2: Theory and prediction inside the cone of silence
[ISVR-TR-92-PT-2] p0367 N78-23882
Jet noise modelling by geometric acoustics. Part 3: A computer program for the prediction of jet mixing noise
[ISVR-TR-93-PT-3] p0367 N78-23883
Self streamlining wind tunnel: Further low speed testing and final design studies for the transonic facility
[NASA-CR-157111] p0456 N78-27141
A theoretical and experimental study of circulation control with reference to fixed wing applications
[RP-582] p0623 N78-33052
SOUTHERN ILLINOIS UNIV., CARBONDALE.
Preliminary candidate advanced avionics system for general aviation.
[NASA-CR-152025] p0024 N78-10060
SOUTHWEST RESEARCH INST., SAN ANTONIO, TEX.
Engine lubricant requirements for Remotely Piloted Vehicles (RPV)
[AD-A046238] p0142 N78-14051
Critical inspection of bearings for life extension
p0444 N78-26472
Effects of high availability fuels on combustor properties
[AD-A054229] p0553 N78-30259
SPERRY FLIGHT SYSTEMS, PHOENIX, ARIZ.
Description and theory of operation of the computer by-pass system for the NASA F-8 digital fly-by-wire control system
[NASA-CR-144865] p0349 N78-22076
SPERRY RAND CORP., GREAT NECK, N. Y.
Laser-gyro strapdown inertial system applications
p0439 N78-26130
SPORTAVIA-PUETZER G.M.B.H. AND CO., KG, DAHLEM (WEST GERMANY).
Experimental determination and comparison with theory of thrust, noise and driving weight of propeller drives
[BMVG-FBWT-77-16] p0245 N78-18072
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
SQUADRON 330/B-WING, BANAK AFB, LAKSALV (NORWAY).
Air-sea rescue operations. Search and rescue experience
p0262 N78-19134

SRI INTERNATIONAL CORP., MENLO PARK, CALIF.
Fire detector response in aircraft applications
p0599 A78-53674
Piloted flight simulator study of low-level wind shear, phase 2
[AD-A047251] p0200 N78-16067
Exploratory development of conductive coating materials
[AD-A048253] p0247 N78-18138
STANDARD ELECTRIK LORENZ A.G., STUTTGART (WEST GERMANY).
Precise enroute navigation based on ground-derived techniques
p0315 N78-21078
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0360 N78-23078
DME-based system for enroute/terminal navigation, all-weather landing and air traffic control
p0433 N78-26069
STANDARD TELECOMMUNICATION LABS. LTD., HARLOW (ENGLAND).
An optical fibre, multi-terminal data system for aircraft
p0202 N78-16849
STANFORD RESEARCH INST., MENLO PARK, CALIF.
Piloted flight simulator study of low-level wind shear, phase 1
[AD-A047985] p0211 N78-17078
STANFORD TELECOMMUNICATIONS, INC., MCLEAN, VA.
The Single-Site Collision Avoidance System (SS-CAS)
[AD-A045977] p0196 N78-16035
STANFORD UNIV., CALIF.
Perturbation solutions for blade-to-blade surfaces of a transonic compressor
p0012 A78-12307
Kalman filter divergence and aircraft motion estimators
p0225 A78-26785
On the optimization of discrete structures with aeroelastic constraints
p0385 A78-39135
Unsteady aerodynamic modeling and active aeroelastic control
[NASA-CR-148019] p0019 N78-10017
Unsteady aerodynamic modeling and active aeroelastic control
p0199 N78-16061
Air freight demand models: An overview
[NASA-CR-152148] p0413 N78-25979
Minimum time acceleration of aircraft turbofan engines by using an algorithm based on nonlinear programming
p0440 N78-26142
Effect of chordwise forces and deformations and deformation due to steady lift on wing flutter
p0449 N78-27077
Guidance logic for decelerating spiral approach of a tilt-rotor aircraft in the presence of wind
p0452 N78-27110
Effect of chordwise forces and deformations and deformations due to steady lift on wing flutter
[AD-A053640] p0502 N78-29110
The transonic flow on a helicopter rotor
p0557 N78-31042
Theory on acoustic sources
p0619 N78-32824
STEIN SEAL CO., PHILADELPHIA, PA.
Feasibility study of negative lift circumferential type seal for helicopter transmissions
[NASA-CR-135302] p0212 N78-17390
STEVENS INST. OF TECH., HOBOKEN, N. J.
Research on the flutter of axial-turbomachine blading
[AD-A047086] p0194 N78-16021
STRATEGIC AIR COMMAND, OFFUTT AFB, NEBR.
TF-30-P-7 installed trim correction
[AD-A047023] p0199 N78-16058
STUTTGART UNIV. (WEST GERMANY).
Analysis and synthesis of operational loads
[ISD-193] p0310 N78-20551
Proposal for a cost effective radar navigation system for low altitude and terminal area flight
p0431 N78-26057
SUMMERFIELD ASSOCIATES, SANTA MONICA, CALIF.
Determination of the flight equipment maintenance costs of commuter airlines
[NASA-CR-152069] p0213 N78-17931
SUSSEX UNIV., BRIGHTON (ENGLAND).
Performance and design of transpiration-cooled turbine blading
p0320 N78-21129
The effect of free-stream turbulence upon heat transfer to turbine blading
p0323 N78-21155
SYDNEY UNIV. (AUSTRALIA).
The theoretical performance of a straight-bladed, vertical axis wind turbine
[ATN-7802] p0445 N78-26561
SYRACUSE UNIV., N. Y.
Shear buckling of corrugated plates with quasi-sinusoidal corrugations
p0616 N78-32458
SYSTEMS CONTROL, INC., PALO ALTO, CALIF.
Airborne navigation system performance during RNAV/MLS transition
p0064 A78-15633
Remotely piloted aircraft in the civil environment
p0070 A78-16100
Aerodynamic coefficient estimation for dynamic wind tunnel models
p0113 A78-18058
New frequency domain methods for system identification
p0182 A78-23883
Multivariable quadratic synthesis of an advanced turbofan engine controller
p0226 A78-26793
An operational evaluation of flight technical error
[AD-A042796/3] p0021 N78-10040
Identification of Spey engine dynamics in the augmentor wing jet STOL research aircraft from flight data
[NASA-CR-152054] p0028 N78-10094
Control theory and Navy applications
[AD-A045603] p0099 N78-13075
F100 multivariable control synthesis program. Volume 1: Development of F100 control system
[AD-A052420] p0399 N78-24144
F100 multivariable control synthesis program. Volume 2: Appendices A through K
[AD-A052346] p0399 N78-24145
Loran-C, Omega, and Differential Omega applied to the civil air navigation requirement of CONUS, Alaska, and offshore. Volume 2: Analysis
[AD-A056741] p0625 N78-33075
SYSTEMS CONTROL, INC., WEST PALM BEACH, FLA.
Area navigation systems and procedures
p0316 N78-21091
SYSTEMS RESEARCH LABS., INC., DAYTON, OHIO.
A theory for longitudinal short-period pilot induced oscillations
[AD-A056982] p0630 N78-33120
SYSTEMS TECHNOLOGY, INC., HAWTHORNE, CALIF.
Advanced Digital Avionics System for general aviation
[AIAA 77-1494] p0005 A78-12243
Preliminary Candidate Advanced Avionics System (PCAAS)
[NASA-CR-152026] p0024 N78-10061
Survey of piloting factors in V/STOL aircraft with implications for flight control system design
p0259 N78-19111
Development of automatic and manual flight director landing systems for the XV-15 tilt rotor aircraft in helicopter mode
[NASA-CR-152140] p0348 N78-22071
SYSTEMS TECHNOLOGY, INC., MOUNTAIN VIEW, CALIF.
The determination of some requirements for a helicopter flight research simulation facility
[NASA-CR-152066] p0030 N78-10117
Study of a safety margin system for powered-lift STOL aircraft
[NASA-CR-152139] p0396 N78-24117
Simulation and analysis of wind shear hazard
[NASA-CR-157470] p0504 N78-29699
Computed responses of several aircraft to atmospheric turbulence and discrete wind shears
[NASA-CR-152185] p0612 N78-32106

T

TECHNION - ISRAEL INST. OF TECH., HAIFA.
The evaluation of the vortex roll-up over and behind wings related to their non-linear aerodynamic characteristics
p0092 N78-13013
The damage sum in fatigue of structure components
[ICAF-1032] p0411 N78-25454
Effect of aircraft loading program modifications on the fatigue life and damage cumulation. Part 1: Effect of load peaks in case of central hole sheet specimens
[TAE-334-PT-1] p0616 N78-32462
TECHNISCHE HOCHSCHULE, AACHEN (WEST GERMANY).
Investigations of the local heat transfer coefficient of a convection cooled rotor blade
p0319 N78-21126
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
TECHNISCHE HOCHSCHULE, DARMSTADT (WEST GERMANY).
The influence of coolant turbulence intensity on film cooling effectiveness
p0321 N78-21136
A simple criterion to distinguish between point and integral performance problems and its use to simplify flight profile optimizations
p0434 N78-26076
TECHNISCHE HOGESCHOOL, DELFT (NETHERLANDS).
Description of a five-parameter profile family
[VTH-LR-220] p0138 N78-14011
The generation of motion cues on a six-degrees-of-freedom motion system
[VTH-LR-248] p0143 N78-14062
Description of noise measurement and analysis procedures developed for light general aviation aircraft
[VTH-LR-246] p0146 N78-14874
Low-speed aerodynamic characteristics of an 18 percent thick airfoil section designed for the all-flying tailplane of the M-300 sailplane
[VTH-LR-226] p0148 N78-15019
The use of the total-head rise across the propeller of the De Havilland Canada DHC-2 beaver as a similarity parameter to simulate power-on flight in the wind tunnel
[VTH-190] p0149 N78-15022
Heat transfer characteristics of the closed thermosyphon system
p0320 N78-21132
Prediction of off-design performance of turbojet and turbofan engines
p0434 N78-26077
The lifting wing with minimum drag in supersonic flow
[VTH-LR-234] p0488 N78-28065
TECHNISCHE UNIVERSITAET, BRUNSWICK (WEST GERMANY).
Air traffic safety in the airport near range
[TUBS/SFB58/M4] p0304 N78-20103
Simulation and development possibilities of the manual control concept in the near range and control zone
p0304 N78-20104
Program for simulation of air traffic and air space structure of the Frankfurt near range, a planning control and a collision avoidance system with situation dependent avoidance maneuvers
p0304 N78-20105
Development of a binary frequency synthesis as control element for frequency correction in time-synchronous collision systems without onboard atomic frequency standard avoidance
p0304 N78-20106
Design of a collision avoidance system model with statistical interrogation
p0304 N78-20107
Flight safety hazards by shear winds
[TUBS/SFB58/62] p0359 N78-23073
Open-loop compensation of wind-shear effects in low level flight
p0431 N78-26052
Direct lift control for flight path control and gust alleviation
p0434 N78-26072
TECHNISCHE UNIVERSITAET, MUNICH (WEST GERMANY).
The on-board calculation of optimal climbing paths
p0434 N78-26078
TECHNOLOGY, INC., DAYTON, OHIO.
Acquisition of operational data during NOE missions
[AD-A055922] p0609 N78-32089
TENNESSEE UNIV., KNOXVILLE.
Analysis of heat transfer in a simulated wing-elevon cove in hypersonic flow
[AIAA PAPER 78-40] p0171 A78-22556
An interaction solution algorithm for viscous aerodynamic performance prediction
[AIAA PAPER 78-153] p0173 A78-22589
Acoustic investigation of upper surface blown flaps
p0092 N78-13005
An analysis of the influence of some external disturbances on the aerodynamic stability of turbine engine axial flow fans and compressors
p0208 N78-17054
Finite element concepts in computational aerodynamics
p0270 N78-19801
TENNESSEE UNIV. SPACE INST., TULLAHOMA.
C/STOL flight in wind disturbed by the presence of buildings
[AIAA 78-1332] p0482 A78-46530
Fundamental studies of subsonic and transonic flow separation. Part 2: Second phase summary report
[AD-A048615] p0237 N78-18007
Transient dynamics of a flexible rotor with squeeze film dampers
[NASA-CR-3050] p0616 N78-32433
TEXAS A&M RESEARCH FOUNDATION, COLLEGE STATION.
Aeroelastic characteristics of a cascade of blades
[AD-A055619] p0615 N78-32392
TEXAS A&M UNIV., COLLEGE STATION.
A Costas loop with tangent error signal for use in Navstar GPS avionics
p0530 A78-49858
The development and application of a simple method for determining unsteady airloads in subsonic compressible flow
[AD-A052417] p0394 N78-24096
Replacement process analysis: An interim report on replacement models
[AD-A052411] p0399 N78-24150
TEXAS TECHNOLOGICAL UNIV., LUBBOCK.
Ellipsometric determination of properties of films on rough surfaces such as aluminum alloy aircraft skin
[AD-A056782] p0633 N78-33413
TEXAS UNIV., AUSTIN.
A tandem-queue algorithm for evaluating overall airport capacity
p0202 N78-16741
TEXAS UNIV. AT AUSTIN.
Flight measurements of the wing tip vortex
p0449 N78-27074
Problem-solving with simulation in the world of an air traffic controller
p0451 N78-27098
TEXTRON BELL AEROSPACE CO., BUFFALO, N. Y.
Tests for particle contamination of the engine inlet airflow from the LACV-30 air management system
[AD-A053642] p0458 N78-27295
Pilot model air cushion vehicle (LACV-30) program
[AD-A053686] p0492 N78-28275
LACV-30 test and demonstration report
[AD-A053610] p0492 N78-28276
LACV-30 auxiliary power unit investigation
[AD-A053566] p0492 N78-28277
TEXTRON BELL HELICOPTER, FT. WORTH, TEX.
The Bell Model 222
p0263 N78-19138
Helicopter external noise prediction and correlation with flight test
p0620 N78-32829
TIMKEN CO., CANTON, OHIO.
Tapered roller bearing development for aircraft turbine engines
[AD-A054045] p0504 N78-29458
TOKYO UNIV. (JAPAN).
A new interpretation of the backside parameter in the airplane flight-path control
p0088 N78-12098
Improved methods for calculating the thickness noise
p0620 N78-32832

TORONTO UNIV. (ONTARIO).
Theoretical analysis of a loop type flexible skirt air cushion
[UTIAS-TN-204] p0081 N78-12029
Duct effects on the dynamic fan characteristics of air cushion systems
[UTIAS-TN-211] p0081 N78-12030
The application of techniques for predicting STOL aircraft response to wind shear and turbulence during the landing approach
[UTIAS-215] p0246 N78-18077
Research on various aspects of atmospheric flight
[AD-A033681] p0302 N78-20088
Pressure inside a room subjected to sonic boom
[UTIAS-TN-207] p0345 N78-22029
A review and application of the equivalent deterministic variable technique: The estimation of a STOL aircraft's response to turbulence
[UTIAS-221] p0353 N78-22112
The effects of wind shear on aircraft flight path and methods for remote sensing and reporting of wind shear at airports
[UTIAS-TN-216] p0403 N78-24755
A transonic propeller of triangular plan form: An extension
[UTIAS-TN-218] p0454 N78-27123
TRANS WORLD AIRLINES, INC., KANSAS CITY, MO.
Some airline experience in preventing engine rotor failures
p0027 N78-10090
TRANSPORTATION RESEARCH BOARD, WASHINGTON, D. C.
Research in airport pavements
[AD-A043179] p0031 N78-10120
Implementation plan for an air transportation research information service
[AD-A049301] p0256 N78-19081
Bibliography: Airports
[AD-A049879/0] p0354 N78-22116
TRANSPORTATION SYSTEMS CENTER, CAMBRIDGE, MASS.
Air traffic control experimentation and evaluation with the NASA ATS-6 satellite. Volume 1: Executive summary
[AD-A046509] p0139 N78-14026
Aircraft wake vortices: A state-of-the-art review of the United States R and D program
[AD-A042442] p0195 N78-16025
Airline delay trends, 1974-1975. A study of block time delays, ground and airborne, for scheduled air carriers
[AD-A039483] p0195 N78-16028
Airport surface traffic control visual ground aids engineering and development plan
[AD-A038153] p0196 N78-16037
Airport surface traffic control TAGS planning alternatives and cost/benefit analysis
[AD-A037790] p0196 N78-16038
General aviation avionics statistics: 1974
[AD-A045209] p0198 N78-16050
Preliminary limited surveillance radar (LSR) cost/benefit analysis
[AD-A046829] p0201 N78-16245
Characterization of current tower cab environments
[AD-A048306] p0239 N78-18026
Tower-related major system development programs
[AD-A054608] p0489 N78-28076
Airline delay trends, 1972-1977
[AD-A056867] p0624 N78-33062
TRW, INC., CLEVELAND, OHIO.
Cost analysis of advanced turbine blade manufacturing processes
[NASA-CR-135203] p0027 N78-10092
FRS composites for advanced gas turbine engine components
[AD-A050595] p0355 N78-22165
TURBOMECA S. A. - BREVETS SZYDLOWSKI, BIZANOS (FRANCE).
Problems concerning high temperatures in small turbomachines
p0319 N78-21121

U

UNITED TECHNOLOGIES CORP., EAST HARTFORD, CONN.
Fuel consumption improvement in current transport engines
[AIAA PAPER 78-930] p0475 A78-45097
UNITED TECHNOLOGIES CORP., STRATFORD, CONN.
Investigation of the compliant rotor concept
[AD-A042338] p0022 N78-10051
Preliminary design study of an integrated tail rotor servo power module
[AD-A047678] p0210 N78-17072
Helicopter freewheel unit design guide
[AD-A047559] p0307 N78-20124
Advanced overrunning clutch technology
[AD-A052635] p0403 N78-24557
UNITED TECHNOLOGIES CORP., SUNNYVALE, CALIF.
An improved analytical model of the separated region on nozzle boattails
[AIAA PAPER 78-995] p0464 A78-43542
UNITED TECHNOLOGIES CORP., WINDSOR LOCKS, CONN.
Preliminary design of an accident Information Retrieval System (AIRS)
[AD-A055590] p0568 N78-31952
UNITED TECHNOLOGIES RESEARCH CENTER, EAST HARTFORD, CONN.
A method for calculating externally blown flap noise
[NASA-CR-2954] p0311 N78-20920
Evaluation of tantalum fiber reinforced Si3N4
[AD-A051657] p0364 N78-23152
Experimental assessment of theory for refraction of sound by a shear layer
[NASA-CR-145359] p0412 N78-25831
Applications of advanced transport aircraft in developing countries
[NASA-CR-145343] p0413 N78-25985
Noise due to rotor-turbulence interaction
p0619 N78-32823
UNIVERSITY COLL., LONDON (ENGLAND).
Force measurements on finite wings in oscillatory vertical gusts
p0346 N78-22037

V

VEHICLE SYSTEMS DEVELOPMENT CORP., UPLAND, CALIF.
Helicopter Ground Mobility System (HGMS) concept formulation and selection
[AD-A047507] p0211 N78-17080
VEREINIGTE FLUGTECHNISCHE WERKE-FOKKER G.M.B.H., BREMEN (WEST GERMANY).
Basic aerodynamic research on the airframe integration of high bypass engines, part 1
[BMFT-FB-W-77-20] p0349 N78-22083
Supporting project activities in the civil components program "Wing Section'
[BMFT-FB-W-77-26] p0350 N78-22084
Civil components program "Wing Section'. Preliminary design of model wing and pylon mock-ups
[BMFT-FB-W-77-27] p0350 N78-22085
Civil components program "Wing Section'. Preliminary design of engine mounting
[BMFT-FB-W-77-28] p0350 N78-22086
Engine procurement for the test program "Civil Components Program Wing Section'
[BMFT-FB-W-77-29] p0350 N78-22087
Civil components program "Wing Section'. Wing structure parameter study
[BMFT-FB-W-77-30] p0350 N78-22088
Civil components program "Wing Section'. Concept for large model tests at Modane
[BMFT-FB-W-77-31] p0350 N78-22089
Low noise propulsion system for general aviation
[BMFT-FB-W-77-23] p0353 N78-22108
Comparison of estimated and flight data for rolling take-off and transition of a VTOL aircraft
p0435 N78-26083
VEREINIGTE FLUGTECHNISCHE WERKE-FOKKER G.M.B.H., LEMWERDER (WEST GERMANY).
Detectability of flaws in boron and carbon composite parts
p0444 N78-26477
VERVE RESEARCH CORP., ROCKVILLE, MD.
Study requirements for an integrated air/ground communications facility
[AD-A042514/0] p0031 N78-10342
VIRGINIA POLYTECHNIC INST. AND STATE UNIV., BLACKSBURG.
Systematic investigation of models of helicopter with a slung load
p0149 N78-15026
The flow about a slender propeller-driven body in a temperature stratified fluid
p0154 N78-15432

The effect of Whitcomb winglets and other wingtip modifications on wake vortices
p0203 N78-16988
Three dimensional steady and unsteady asymmetric flow past wings of arbitrary planforms
p0346 N78-22035
Structural dynamics, stability, and control of helicopters
[NASA-CR-158909] p0552 N78-30139
Three dimensional fully viscous shock-layer flows over sphere-cones at high altitudes and angles of attack
p0603 N78-32040

VIRGINIA UNIV., CHARLOTTESVILLE.
Ride quality assessment. III - Questionnaire results of a second flight programme
p0050 A78-13478
Handling qualities of aircraft in the presence of simulated turbulence
p0278 A78-29643
Ride quality evaluation. IV - Models of subjective reaction to aircraft motion
p0509 A78-47490
Model of aircraft passenger acceptance
p0526 A78-49684
Optimal aircraft simulator development by adaptive random search optimization
p0246 N78-18082
Unsteady loads due to propulsive lift configurations. Part A: Investigation of scaling laws
[NASA-CR-156120] p0300 N78-20067
Unsteady loads due to propulsive lift configurations. Part B: Pressure and velocity measurements in a three dimensional wall jet
[NASA-CR-156121] p0300 N78-20068
Unsteady loads due to propulsive lift configurations. Part C: Development of experimental techniques for investigation of unsteady pressures behind a cold model jet
[NASA-CR-156122] p0300 N78-20069
Unsteady loads due to propulsive lift configurations. Part D: The development of an experimental facility for the investigation of scaling effects on propulsive lift configurations
[NASA-CR-156123] p0300 N78-20070
Investigations of scaling laws for jet impingement
p0393 N78-24074
Survey of air cargo forecasting techniques
[NASA-CR-145329] p0406 N78-25068
Demand modelling of passenger air travel: An analysis and extension, volume 2
[NASA-CR-157402] p0545 N78-30069
Optimization of MLS receivers for multipath environments
[NASA-CR-157736] p0609 N78-32080
Aerodynamic stability testing with magnetically suspended models
p0612 N78-32108
Dynamic analysis of flexible rotor-bearing systems using a model approach
p0616 N78-32424

VON KARMAN INST. FOR FLUID DYNAMICS, RHODE-SAINT-GENESE (BELGIUM).
The measurement of film cooling effectiveness on turbine components in short duration wind tunnels
p0322 N78-21152

VOUGHT CORP., DALLAS, TEX.
A combined potential and viscous flow solution for V/STOL engine inlets
[AIAA PAPER 78-142] p0159 A78-20702
Computational wing optimization and wind tunnel test of semi-span model
[AIAA PAPER 78-102] p0172 A78-22575
Estimating maximum instantaneous distortion from inlet total pressure rms measurements
[AIAA PAPER 78-970] p0463 A78-43525
Study to identify stress corrosion prone parts on the TA-7C aircraft
[AD-A045489] p0100 N78-13186
Investigation of a variable camber wing design
[AD-A045951] p0137 N78-14000
Analysis of the influence of the OGE/IGE transition on VAK-191B flying qualities in hover
p0259 N78-19109
Application of AIDS to the A-7E and a projected future tactical aircraft
[AD-A053775] p0453 N78-27118

VOUGHT CORP., HAMPTON, VA.
ENGINEL: A single rotor turbojet engine cycle match performance program
[NASA-CR-145267] p0087 N78-12089
A procedure for the determination of the effect of fuselage nose bluntness on the wave drag of supersonic cruise aircraft
[NASA-CR-145306] p0235 N78-17994
Low-speed aerodynamic characteristics from wind-tunnel tests of a large-scale advanced arrow-wing supersonic-cruise transport concept
[NASA-CR-145280] p0312 N78-21053
Paneling techniques for use with the VORLAX computer program
[NASA-CR-145364] p0405 N78-25054
Plotit-method of interactively plotting input data for the vorlax computer program
[NASA-CR-158896] p0495 N78-28830
Design of a large span-distributed load flying-wing cargo airplane with laminar flow control
[NASA-CR-145376] p0543 N78-30045
Boeing-747 aircraft with external cargo pod
[NASA-CR-158932] p0604 N78-32047
Preliminary design characteristics of a subsonic business jet concept employing laminar flow control
[NASA-CR-158958] p0626 N78-33087

VOUGHT CORP. ADVANCED TECHNOLOGY CENTER, INC., DALLAS, TEX.
V-STOL ejector short diffuser study
[AD-A042319] p0029 N78-10104
Calibration of transonic and supersonic wind tunnels
[NASA-CR-2920] p0152 N78-15058

W

WASHINGTON UNIV., SEATTLE.
Low-speed test limit of V/STOL model located vertically off-center
p0277 A78-29642
A laser-powered flight transportation system
[AIAA PAPER 78-1484] p0528 A78-49781
Limits on low speed wind tunnel tests of rotors
[AD-A046086] p0148 N78-15008
Unsteady hovering wake parameters identified from dynamic model tests
p0203 N78-16992
Application of system identification to analytic rotor modeling from simulated and wind tunnel dynamic test data
p0240 N78-18040
A perturbation method for predicting amplitudes of nonlinear wheel shimmy
p0325 N78-21464

WASHINGTON UNIV., ST. LOUIS, MO.
Benefit-cost evaluation of an intra-regional air service in the Bay area
[NASA-CR-152084] p0256 N78-19082

WEAPONS RESEARCH ESTABLISHMENT, SALISBURY (AUSTRALIA).
Subsonic, inviscid flow by the finite element method
[WRE-TR-1858(W)] p0147 N78-15005

WESTINGHOUSE DEFENSE AND ELECTRONIC SYSTEMS CENTER, BALTIMORE, MD.
F-4E fire control system simulator, F-4E austere/heads up display (HUD), SEAFAC programs
[AD-A042255] p0031 N78-10124
F-4E avionics update
[AD-A047949] p0243 N78-18061
Study of rough ground and grading criteria for ILS GS site preparation
[AD-A053294] p0452 N78-27101
Analysis of the performance of image glide slope antenna in the presence of truncated ground
[AD-A054415] p0493 N78-28296
Capture effect array glide slope guidance study
[AD-A055678] p0559 N78-31073

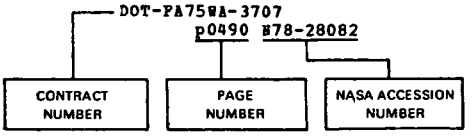
WESTINGHOUSE ELECTRIC CORP., BALTIMORE, MD.
Modular packaging approaches
[AD-A048205] p0249 N78-18321

WESTINGHOUSE ELECTRIC CORP., CROW LYNNE, PA.
Ceramics technology readiness development program. Phase 1: Conceptual designs and

material screening
[FE-2786-12] p0632 N78-33243
WESTINGHOUSE ELECTRIC CORP., PITTSBURGH, PA.
Nuclear Bi-Brayton system for aircraft propulsion study
[AD-A054672] p0502 N78-29106
WESTLAND HELICOPTERS LTD., HAYES (ENGLAND).
Theoretical models of helicopter rotor noise
p0619 N78-32822
WESTLAND HELICOPTERS LTD., YEOVIL (ENGLAND).
High density stable collisionless air traffic: Computer simulations of traffic management in the ITV system
[RP-552] p0094 N78-13033
Research Requirements for the improvement of helicopter operations
p0263 N78-19147
Westland Wisp
p0264 N78-19149
WORLD METEOROLOGICAL ORGANIZATION, GENEVA (SWITZERLAND).
A digital continuously updated two minute mean indspeed indicator for use at airports
p0213 N78-17598
A current weather information display system for use at airports
p0213 N78-17600
WRIGHT STATE UNIV., DAYTON, OHIO.
The influence of unsteady aerodynamics on extracted aircraft parameters
[AIAA 78-1343] p0483 A78-46540
On the benefit-to-cost ratio of base-level stocking decisions for low demand items
[AD-A053953] p0460 N78-27979
WYOMING UNIV., LARAMIE.
Assessment of atmospheric condensation nuclei associated with jet aircraft traffic
[AD-A054319] p0504 N78-29705

CONTRACT NUMBER INDEX

Typical Contract Number Index Listing



Listings in this index are arranged alphanumerically by contract number Under each contract number the accession numbers denoting documents that have been produced as a result of research done under that contract are arranged in ascending order with the *IAA* accession numbers appearing first Preceding the accession number is the page number where the citation may be found

AF HIPR-FQ8952-76-66005
p0324 N78-21170
AF ORDER P00972
p0288 A78-31733
AF PROJ. 414N
p0364 N78-23107
AF PROJ. 486U
p0154 N78-15521
p0626 N78-33095
AF PROJ. 649E
p0139 N78-14025
p0304 N78-20101
p0348 N78-22069
AF PROJ. 1366
p0253 N78-19062
AF PROJ. 1367
p0143 N78-14057
p0260 N78-19121
p0499 N78-29087
AF PROJ. 1368
p0024 N78-10059
AF PROJ. 1369
p0407 N78-25082
p0453 N78-27115
AF PROJ. 1476
p0394 N78-24098
AF PROJ. 1710
p0017 N78-10004
AF PROJ. 1959
p0023 N78-10058
p0085 N78-12073
AF PROJ. 2049
p0043 N78-11117
AF PROJ. 2051
p0244 N78-18063
AF PROJ. 2052
p0244 N78-18065
AF PROJ. 2068
p0623 N78-33055
AF PROJ. 2103
p0310 N78-20148
AF PROJ. 2187
p0037 N78-11050
AF PROJ. 2202
p0548 N78-30093
AF PROJ. 2307
p0042 N78-11112
p0459 N78-27455
p0502 N78-29107
p0558 N78-31048
p0615 N78-32392
p0623 N78-33058
AF PROJ. 2308
p0614 N78-32199
AF PROJ. 2313
p0044 N78-11127
p0044 N78-11128
AF PROJ. 2713
p0095 N78-13036
AF PROJ. 3048
p0042 N78-11110
p0088 N78-12093
p0410 N78-25239
AF PROJ. 3066
p0091 N78-12381
p0102 N78-13857
p0399 N78-24144
p0399 N78-24145
p0563 N78-31111
AF PROJ. 3145
p0151 N78-15052
p0409 N78-25096
AF PROJ. 6065
p0021 N78-10038
p0021 N78-10039
AF PROJ. 6096
p0017 N78-10003
AF PROJ. 6114
p0267 N78-19362
AF PROJ. 6146
p0548 N78-30094
AF PROJ. 6190
p0096 N78-13044
AF PROJ. 6770
p0085 N78-12075
AF PROJ. 7071
p0456 N78-27139
AF PROJ. 7231
p0495 N78-28888
p0495 N78-28889
p0495 N78-28893
AF PROJ. 7233
p0609 N78-32084
AF PROJ. 7381
p0401 N78-24344
p0553 N78-30213
AF PROJECT 6095
p0062 A78-15591
p0530 A78-49859
AF PROJECT 7531
p0288 A78-31733
AF PROJECT 7629
p0538 A78-49987
AF PROJECT 9781-01
p0330 A78-33179
AF TASK 69
p0125 A78-19442
AF 33(657)-10463
p0017 N78-10007
AF 49(638)-991
p0017 N78-10007
AF 49(638)-1623
p0330 A78-33179
AF-AFOSR-71-2045
p0078 A78-17131
AF-AFOSR-73-2492
p0341 A78-35786
AF-AFOSR-74-2460A
p0529 A78-49837
AF-AFOSR-74-2659
p0186 A78-24022
AF-AFOSR-74-2667
p0279 A78-29812
AF-AFOSR-74-2675
p0161 A78-20756
AF-AFOSR-74-2704
p0415 A78-40493
AF-AFOSR-74-2712
p0327 A78-32534
AF-AFOSR-75-2784
p0002 A78-11631
AF-AFOSR-75-2808B
p0176 A78-23219
AF-AFOSR-76-2889A
p0527 A78-49713
AF-AFOSR-76-2936
p0377 A78-37772
AF-AFOSR-76-2954
p0002 A78-11634
AF-AFOSR-76-2954E
p0475 A78-45127
AF-AFOSR-76-2968
p0531 A78-49865
AF-AFOSR-76-2997
p0536 A78-49961
AF-AFOSR-76-3005A
p0531 A78-49864
AF-AFOSR-77-3289
p0421 A78-41845
AF-AFOSR-77-3413
p0536 A78-49961
AF-AFOSR-2091-71
p0302 N78-20088
AF-AFOSR-2145-71
p0092 N78-13013
AF-AFOSR-2451-73G
p0633 N78-33413
AF-AFOSR-2700-74
p0615 N78-32392
AF-AFOSR-2857-75
p0459 N78-27455
AF-AFOSR-2916-76
p0564 N78-31118
AF-AFOSR-2942-76
p0302 N78-20086
AF-AFOSR-2968-76
p0565 N78-31124
AF-AFOSR-3011-76
p0460 N78-27979
AF-AFOSR-3028-76A
p0353 N78-22112
AF-AFOSR-3158-77
p0323 N78-21162
AF-AFOSR-3237-77
p0459 N78-27457
AF-AFOSR-3278-77
p0633 N78-33413
AF-AFOSR-3501-78
p0399 N78-24150
AFAPL-TR-77-17
p0029 N78-10108
AFOSR-ISSA-77-0016
p0614 N78-32199
APL/JHU-600276
p0325 N78-21402
ARGC-P70/17452
p0222 A78-26229
p0223 A78-26238
ARO PROJ. V32A-A1A
p0020 N78-10033
ARO PROJ. V32A-04A
p0020 N78-10033
ARO PROJ. V33A-A8A
p0394 N78-24089
ARO PROJ. V41A-J0A
p0020 N78-10033
ARO PROJ. V41A-N9A
p0020 N78-10033
ARPA ORDER 1442
p0330 A78-33179
ARPA ORDER 1849
p0611 N78-32099
p0611 N78-32100
ARPA ORDER 2267
p0355 N78-22211
ARPA ORDER 2731
p0222 A78-26157
AT(04-3)-767
p0059 N78-15337
AY968263
p0140 N78-14037
BMFT-LFF-33
p0349 N78-22083
BMFT-LFF-7606-6
p0353 N78-22114
BMFT-LFK-7511
p0350 N78-22085
p0350 N78-22086
p0350 N78-22087
p0350 N78-22088
p0350 N78-22089
BMFT-LFK-7511/12
p0350 N78-22084
BMFT-LFK-7512
p0350 N78-22090
p0351 N78-22091
BMFT-LFK-7530
p0307 N78-20127
BMFT-LFK-7551-2
p0353 N78-22108
BMVG-T/RF-42/80001/81400
p0475 A78-45128
CNR-SAS-76-0031
p0443 N78-26462
CNR-73,00166,07
p0121 A78-19077
p0121 A78-19078
CNR-74,00374,07
p0121 A78-19077
p0121 A78-19078
CNR-74,00905,07
p0070 A78-15920
p0070 A78-15921
CNR-75,01352,07
p0118 A78-18915
CNR-77,01087,91,115,9694
p0527 A78-49733
CNR-115,2648,07,CT-76,00480
p0526 A78-49708
CTDA-01SJ,T8200-6-6549
p0279 A78-29785
DA PROJ. 1F1-63204-DP-38
p0396 N78-24118
p0396 N78-24119
DA PROJ. 1F2-62209-AH-76
p0022 N78-10051
p0042 N78-11108
p0096 N78-13045
p0211 N78-17080
p0317 N78-21098
p0352 N78-22104
p0362 N78-23097
p0397 N78-24126
p0400 N78-24158
p0403 N78-24557
p0439 N78-26136
p0568 N78-31952
DA PROJ. 1F2-62209-AH76-06
p0626 N78-33093
DA PROJ. 1F2-63208-DB-52
p0307 N78-20123
DA PROJ. 1F2-63209-DB-38
p0022 N78-10052
DA PROJ. 1G2-62207-AH-89
p0560 N78-31089
DA PROJ. 1G2-62207-AH-8902
p0548 N78-30095
DA PROJ. 1L1-61102-AH-45
p0397 N78-24125
p0557 N78-31044
DA PROJ. 1L2-62209-AH-76
p0037 N78-11053
p0256 N78-19084
p0359 N78-23071
p0360 N78-23082
p0561 N78-31096
DA PROJ. 1L2-63211-D-157
p0361 N78-23083
DA PROJ. 1L3-62303-A-214
p0084 N78-12067
DA PROJ. 1L7-62723-A-42701
p0492 N78-28278
DA PROJ. 1T1-61101-A-91A
p0613 N78-32169
DA PROJ. 2M0-61102-B-53B
p0256 N78-19080
DA PROJ. 4A1-61102-AT-24
p0615 N78-32327
DA PROJ. 4A7-62719-AT-04
p0144 N78-14183

CONTRACT NUMBER INDEX

DA PROJ. 4A7-62719-AT-40
p0502 N78-29111
DA PROJ. 4A7-62720-A-896
p0367 N78-23879
DA PROJ.1L1-61102-AH-45
p0325 N78-21410
DA-ARO(D)-31-124-G1114
p0277 A78-29642
DA-ARO(D)-31-124-72-G019
p0148 N78-15008
DA-ARO(D)-31-124-72-G134
p0255 N78-19073
DA-ARO(D)-31-124-73-G184
p0473 A78-44832
DA-ARO(D)-124-G154
p0588 A78-51594
DA-ERO-75-G-021
p0256 N78-19080
DA-ERO-75-G-074
p0322 N78-21152
DAAA09-74-C-2077
p0267 N78-19517
DAAA21-74-C-0114
p0044 N78-11201
DAAD05-76-C-0763
p0407 N78-25081
DAAD05-76-C-0772
p0307 N78-20122
DAAG25-70-C-0311
p0096 N78-13047
DAAG29-C-027
p0339 A78-35371
DAAG29-76-C-0027
p0620 N78-32828
DAAG29-76-G-0007
p0473 A78-44832
DAAG29-76-G-0034
p0476 A78-45143
p0485 A78-46563
DAAG29-76-G-0045
p0548 N78-30092
DAAG29-76-G-0229
p0578 A78-50635
DAAG29-76-G-0241
p0394 N78-24096
DAAG29-76-G-0318
p0548 N78-30092
DAAG29-77-G-0067
p0394 N78-24094
DAAG29-77-G-0108
p0158 A78-20663
DAAG39-76-C-0129
p0265 N78-19163
DAAG46-71-C-0162
p0611 N78-32099
p0611 N78-32100
DAAG46-76-C-0029
p0355 N78-22211
DAAG53-76-C-0003
p0553 N78-30259
DAAH01-72-C-0089
p0001 A78-10463
DAAJ01-70-A-0324
p0085 N78-12072
DAAJ01-71-A-0335
p0612 N78-32109
DAAJ01-71-C-0840
p0323 N78-21163
p0324 N78-21164
p0349 N78-22081
p0353 N78-22113
p0396 N78-24122
p0499 N78-29089
p0500 N78-29094
DAAJ01-73-C-0781
p0178 A78-23439
DAAJ01-74-C-1052
p0366 N78-23438
DAAJ01-77-C-0354
p0564 N78-31113
DAAJ02-C-0031
p0181 A78-23834
DAAJ02-72-C-0082
p0396 N78-24118
p0396 N78-24119
DAAJ02-73-C-0106
p0029 N78-10109
DAAJ02-74-C-0028
p0307 N78-20124
p0403 N78-24557
DAAJ02-74-C-0036
p0256 N78-19084
DAAJ02-74-C-0040
p0548 N78-30095
p0560 N78-31089
DAAJ02-74-C-0055
p0140 N78-14037
p0149 N78-15032
DAAJ02-75-C-0017
p0317 N78-21098
DAAJ02-75-C-0020
p0096 N78-13045
DAAJ02-75-C-0026
p0210 N78-17069
DAAJ02-75-C-0028
p0261 N78-19124
DAAJ02-75-C-0041
p0607 N78-32070
p0607 N78-32071
DAAJ02-75-C-0042
p0022 N78-10052
DAAJ02-75-C-0046
p0564 N78-31115
DAAJ02-75-C-0051
p0362 N78-23097
DAAJ02-75-C-0053
p0397 N78-24126
DAAJ02-76-C-0003
p0022 N78-10051
DAAJ02-76-C-0006
p0307 N78-20123
DAAJ02-76-C-0007
p0306 N78-20120
DAAJ02-76-C-0025
p0626 N78-33093
DAAJ02-76-C-0027
p0306 N78-20121
DAAJ02-76-C-0028
p0242 N78-18054
DAAJ02-76-C-0031
p0352 N78-22104
DAAJ02-76-C-0037
p0211 N78-17080
DAAJ02-76-C-0042
p0400 N78-24158
DAAJ02-76-C-0052
p0561 N78-31096
DAAJ02-76-C-0056
p0210 N78-17072
DAAJ02-76-C-0058
p0568 N78-31952
DAAJ02-76-C-0065
p0609 N78-32089
DAAJ02-76-C-0072
p0042 N78-11108
DAAJ02-76-C-0073
p0439 N78-26136
DAAJ02-77-C-0007
p0360 N78-23082
DAAJ02-77-C-0018
p0564 N78-31119
DAAJ02-77-C-0040
p0564 N78-31114
DAAK02-73-C-0221
p0142 N78-14051
DAAK02-75-C-0149
p0458 N78-27295
p0492 N78-28275
p0492 N78-28276
p0492 N78-28277
DAAK03-74-C-0197
p0138 N78-14017
DAAK70-78-C-0001
p0553 N78-30259
DAHC04-68-C-0006
p0059 A78-15337
DAHC04-69-C-0077
p0330 A78-33179
DAHC04-74-G-0007
p0548 N78-30092
DAHC04-74-G-0184
p0394 N78-24096
DAHC04-75-G-0007
p0255 N78-19073
DAHC04-75-G-0023
p0548 N78-30092
DAHC15-73-C-0200
p0398 N78-24133
p0400 N78-24156
p0491 N78-28093
p0550 N78-30119
DASG60-76-C-0020
p0225 A78-26784
DFG-SPB-61
p0583 A78-51158
DFVLR-01-QV-276-ZK-SNA-SLN
p0163 A78-20792
DGRST-74-7-0695
p0299 N78-20060
DNA001-75-C-0054
p0630 N78-33128
DNA001-75-C-0179
p0494 N78-28484
DNA001-76-C-0106
p0490 N78-28085
DNA001-77-C-0012
p0248 N78-18272
DOT-FATQWA-3857
p0087 N78-12088
DOT-FA67NF-AP-21
p0247 N78-18158
DOT-FA68WAI-145
p0458 N78-27314
DOT-FA69NS-162
p0196 N78-16031
p0196 N78-16032
DOT-FA69WA-2066
p0024 N78-10063
DOT-FA70WA-2448
p0595 A78-52959
p0240 N78-18036
p0240 N78-18037
p0240 N78-18038
DOT-FA70WAI-175
p0090 N78-12281
p0139 N78-14025
p0205 N78-17034
p0303 N78-20099
p0304 N78-20101
p0348 N78-22069
p0360 N78-23074
p0493 N78-28297
DOT-FA71WAI-218
p0354 N78-22118
DOT-FA72WA-3098
p0021 N78-10040
DOT-FA72WAI-261
p0139 N78-14022
p0139 N78-14029
p0206 N78-17035
p0206 N78-17036
p0395 N78-24105
p0559 N78-31074
DOT-FA72WAI-356
p0036 N78-11044
DOT-FA72WAI-621
p0257 N78-19090
DOT-FA73WA-3233
p0021 N78-10037
p0043 N78-11116
DOT-FA73WAI-361
p0030 N78-10118
DOT-FA73WAI-377
p0099 N78-13079
p0144 N78-14183
DOT-FA74WA-3353
p0452 N78-27101
p0493 N78-28296
p0559 N78-31073
DOT-FA74WA-3485
p0428 A78-43041
DOT-FA74WA-3518
p0458 N78-27311
DOT-FA74WAI-424
p0458 N78-27314
DOT-FA74WAI-448
p0248 N78-18264
DOT-FA74WAI-487
p0200 N78-16068
DOT-FA75WA-3553
p0625 N78-33070
DOT-FA75WA-3610
p0043 N78-11122
DOT-FA75WA-3650
p0211 N78-17078
DOT-FA75WA-3658
p0317 N78-21097
DOT-FA75WA-3662
p0625 N78-33075
DOT-FA75WA-3686
p0632 N78-33313
DOT-FA75WA-3688
p0245 N78-18069
DOT-FA75WA-3707
p0490 N78-28082
p0499 N78-29084
p0499 N78-29085
p0560 N78-31088
DOT-FA75WA-3722
p0628 N78-33106
DOT-FA75WAI-570
p0031 N78-10342
DOT-FA76WA-3157
p0517 A78-48062
DOT-FA76WA-3788
p0547 N78-30080
p0615 N78-32330
DOT-FA76WA-3806
p0041 N78-11105
DOT-FA76WA-3821
p0329 A78-33088
p0340 A78-35660
DOT-FA76WA-3840
p0087 N78-12087
DOT-FA76WA-3843
p0142 N78-14049
DOT-FA76WA-3872
p0354 N78-22116
DOT-FA76WAI-589
p0163 A78-20783
p0230 A78-28147
DOT-FA76WAI-594
p0402 N78-24385
p0454 N78-27119
DOT-FA76WAI-609
p0154 N78-15712
p0154 N78-15713
DOT-FA76WAI-610
p0324 N78-21234
DOT-FA76WAI-612
p0493 N78-28295
DOT-FA76WAI-620
p0034 N78-11022
DOT-FA76WAI-622
p0635 N78-33692
DOT-FA76WAI-620
p0451 N78-27093
DOT-FA77WA-3872
p0256 N78-19081
DOT-FA77WA-3936
p0484 A78-46551
DOT-FA77WA-3965
p0517 A78-48062
DOT-FA77WA-4018
p0365 N78-23285
DOT-FA77WAI-432
p0387 A78-39674
DOT-FA77WAI-723
p0634 N78-33615
DOT-FA77WAI-727
p0144 N78-14212
p0239 N78-18027
DOT-FA77WAI-744
p0628 N78-33105
DOT-FA78WA-4075
p0489 N78-28077
p0566 N78-31130
p0566 N78-31131
p0624 N78-33068
DOT-FA78WA-4091
p0566 N78-31134
DOT-FR-54089
p0557 N78-31007
DOT-OS-30034
p0028 N78-10100
p0031 N78-10119
DOT-OS-50232
p0284 A78-30677
DOT-TSC-682
p0395 N78-24099
DOT-TSC-707-1
p0139 N78-14026
DOT-TSC-763
p0524 A78-49428
DOT-TSC-1008
p0019 N78-10024
DOT-TSC-1173
p0428 A78-43043
DRME-76/371
p0034 N78-11018
E(11-1)-3077
p0011 A78-12300

p0012 A78-12302
E(49-18)-2358
p0297 A78-32367
E(49-18)-2465
p0578 A78-50635
E(49-26)-1028
p0445 N78-26552
EF-76-C-01-2256
p0297 A78-32372
EF-77-C-01-2664
p0457 N78-27279
EF-77-C-01-2786
p0632 N78-33243
EPA-R-802925-02-2
p0014 A78-12566
p0373 A78-37297
EPA-68-02-2048
p0107 A78-17575
EY-76-C-02-0016
p0460 N78-27711
EY-76-C-02-3077
p0341 A78-35728
p0403 N78-24808
EY-76-C-04-789
p0562 N78-31099
EY-76-C-04-0613
p0567 N78-31249
EY-76-C-04-0789
p0082 N78-12049
p0093 N78-13022
p0457 N78-27145
p0493 N78-28349
p0608 N78-32078
p0630 N78-33121
EY-76-C-06-1830
p0138 N78-14019
F-INK-07-11966/02871
p0313 N78-21062
F-INK-07-21898
p0313 N78-21062
F-INK-11-12-02871
p0313 N78-21062
F-INK-11-12-73208
p0438 N78-26112
F-INK-11-12-83343
p0313 N78-21062
F-INK-82223-75-007-07-001
p0488 N78-28061
F-INK-82223-76-001-21-001
p0313 N78-21062
p0488 N78-28061
FAA ORDER W1-77-2412-1
p0211 N78-17077
FAA PROJ. 012-102-230
p0037 N78-11046
FAA PROJ. 034-241
p0439 N78-26123
FAA PROJ. 034-241-012
p0139 N78-14029
p0144 N78-14212
p0206 N78-17035
p0206 N78-17036
p0257 N78-19090
p0395 N78-24105
FAA PROJ. 044-326-080
p0257 N78-19088
FAA PROJ. 044-326-340
p0489 N78-28075
FAA PROJ. 052-241-04
p0239 N78-18027
FAA PROJ. 061-221-100
p0037 N78-11045
FAA PROJ. 063-221-000
p0032 N78-10343
FAA PROJ. 072-424-500
p0400 N78-24153
FAA PROJ. 073-320-100
p0257 N78-19089
FAA PROJ. 073-320-510
p0491 N78-28092
FAA PROJ. 075-725-700
p0488 N78-28070
FAA PROJ. 075-725-710
p0489 N78-28071
FAA PROJ. 075-725-755
p0489 N78-28072
FAA PROJ. 151-462-060
p0452 N78-27103
FAA PROJ. 154-451-110
p0239 N78-18021
p0624 N78-33063
FAA PROJ. 171-252-200
p0458 N78-27313
FAA PROJ. 181-520-000
p0045 N78-11251
FAA PROJ. 184-521-100
p0490 N78-28081
FAA PROJ. 213-661-10
p0348 N78-22069
FAA PROJ. 216-102-100
p0400 N78-24154
F04606-76-A-0087
p0500 N78-29098
F04701-75-C-0239
p0196 N78-16035
F04701-77-C-0078
p0153 N78-15368
p0254 N78-19064
F08635-77-C-0002
p0302 N78-20083
F08635-77-C-0062
p0623 N78-33055
F08635-77-C-0181
p0610 N78-32090
F08635-77-C-0210
p0534 A78-49929
F09603-77-A-3104
p0314 N78-21066
p0547 N78-30079
F19628-70-C-0218
p0538 A78-49975
F19628-73-C-0002
p0003 A78-11821
F19628-76-C-0001
p0085 N78-12075
F19628-76-C-0002
p0001 A78-10304
p0139 N78-14022
p0139 N78-14029
p0144 N78-14212
p0206 N78-17035
p0206 N78-17036
p0257 N78-19090
F19628-76-C-0017
p0090 N78-12281
p0139 N78-14025
p0304 N78-20101
p0348 N78-22069
F19628-76-C-0306
p0635 N78-33677
F19628-77-C-0033
p0537 A78-49965
F19628-78-C-0002
p0387 A78-39674
p0239 N78-18027
p0395 N78-24105
p0559 N78-31074
F19628-78-C-0006
p0360 N78-23074
p0493 N78-28297
F29601-71-C-0129
p0117 A78-18755
F29601-74-C-0010
p0169 A78-21992
F29601-75-C-0120
p0169 A78-21992
F29601-76-C-0015
p0099 N78-13078
F29601-76-C-0064
p0126 A78-19580
p0372 A78-37124
F29601-76-C-0133
p0169 A78-21995
F30602-75-F-0256
p0524 A78-49439
F30602-76-C-0074
p0539 A78-49998
F30602-76-C-0193
p0085 N78-12077
p0086 N78-12078
F30602-77-C-0049
p0539 A78-49998
F33615-C-1303
p0063 A78-15627
F33615-68-C-1114
p0018 N78-10009
F33615-72-C-1753
p0149 N78-15025
F33615-72-C-1796
p0154 N78-15521
F33615-73-C-0391
p0096 N78-13044
F33615-73-C-0678
p0317 N78-21099
F33615-73-C-1221
p0243 N78-18062
F33615-73-C-2047
p0098 N78-13066
F33615-73-C-2070
p0029 N78-10108
F33615-73-C-3013
p0055 A78-14961
F33615-73-C-3051
p0482 A78-46527
p0482 A78-46528
F33615-73-C-4036
p0537 A78-49972
F33615-73-C-4155
p0125 A78-19442
F33615-73-C-5066
p0279 A78-29809
F33615-73-C-5171
p0614 N78-32270
F33615-74-C-1040
p0060 A78-15554
p0066 A78-15667
F33615-74-C-1173
p0031 N78-10124
F33615-74-C-2013
p0329 A78-33103
F33615-74-C-2018
p0409 N78-25096
F33615-74-C-2036
p0410 N78-25239
F33615-74-C-2068
p0029 N78-10101
F33615-74-C-3083
p0061 A78-15563
F33615-74-C-5089
p0401 N78-24344
F33615-74-C-5141
p0261 N78-19125
F33615-75-C-1149
p0062 A78-15591
p0530 A78-49859
F33615-75-C-1206
p0244 N78-18065
F33615-75-C-1216
p0009 A78-12283
F33615-75-C-1269
p0249 N78-18321
F33615-75-C-2027
p0042 N78-11107
F33615-75-C-2035
p0502 N78-29108
p0563 N78-31111
F33615-75-C-2053
p0072 A78-16326
p0183 A78-23889
p0226 A78-26793
p0399 N78-24144
p0399 N78-24145
F33615-75-C-2057
p0101 N78-13446
F33615-75-C-2062
p0029 N78-10102
F33615-75-C-3016
p0626 N78-33095
F33615-75-C-3043
p0089 N78-12101
p0089 N78-12102
F33615-75-C-3057
p0147 N78-15007
F33615-75-C-3068
p0043 N78-11117
p0200 N78-16065
F33615-75-C-3073
p0558 N78-31052
F33615-75-C-3093
p0617 N78-32504
p0633 N78-33483
F33615-75-C-3105
p0317 N78-21101
p0548 N78-30093
F33615-75-C-3109
p0153 N78-15239
F33615-75-C-3112
p0037 N78-11054
p0206 N78-17044
F33615-75-C-3123
p0140 N78-14035
F33615-75-C-3136
p0260 N78-19121
F33615-75-C-3148
p0024 N78-10059
F33615-75-C-3152
p0407 N78-25082
F33615-75-C-3154
p0564 N78-31120
F33615-75-C-3159
p0096 N78-13046
F33615-75-C-5065
p0553 N78-30213
F33615-75-C-5087
p0100 N78-13081
F33615-75-C-5097
p0042 N78-11113
p0088 N78-12092
F33615-75-C-5112
p0003 A78-12068
F33615-75-C-5130
p0442 N78-26202
F33615-75-C-5218
p0244 N78-18063
F33615-75-C-5224
p0504 N78-29509
F33615-75-C-5249
p0288 A78-31733
F33615-76-C-0013
p0096 N78-13044
F33615-76-C-0038
p0579 A78-50659
F33615-76-C-0039
p0266 N78-19170
F33615-76-C-0040
p0267 N78-19362
F33615-76-C-0062
p0023 N78-10058
p0085 N78-12073
F33615-76-C-0064
p0364 N78-23108
F33615-76-C-0122
p0023 N78-10054
F33615-76-C-0507
p0271 N78-19849
F33615-76-C-0528
p0265 N78-19164
F33615-76-C-1036
p0539 A78-50002
F33615-76-C-1099
p0198 N78-16049
F33615-76-C-1182
p0244 N78-18064
F33615-76-C-1192
p0618 N78-32754
F33615-76-C-1216
p0083 N78-12062
F33615-76-C-1240
p0627 N78-33100
F33615-76-C-1260
p0318 N78-21105
F33615-76-C-1299
p0627 N78-33097
F33615-76-C-1306
p0249 N78-18319
F33615-76-C-1308
p0562 N78-31102
F33615-76-C-1340
p0243 N78-18061
F33615-76-C-2019
p0504 N78-29458
F33615-76-C-2021
p0476 A78-45134
p0151 N78-15052
F33615-76-C-2051
p0558 N78-31064
F33615-76-C-2052
p0042 N78-11112
F33615-76-C-2070
p0329 A78-33113
p0088 N78-12093
F33615-76-C-2092
p0201 N78-16072
p0245 N78-18071
F33615-76-C-3002
p0450 N78-27089
F33615-76-C-3004
p0453 N78-27115
F33615-76-C-3018
p0137 N78-13999
F33615-76-C-3031
p0182 A78-23862
F33615-76-C-3035
p0394 N78-24098

p0626 N78-33088
F33615-76-C-3066
p0408 N78-25087
F33615-76-C-3073
p0408 N78-25085
F33615-76-C-3104
p0183 A78-23901
F33615-76-C-3107
p0520 A78-48483
F33615-76-C-3109
p0562 N78-31097
F33615-76-C-3111
p0045 N78-11236
F33615-76-C-3133
p0500 N78-29095
F33615-76-C-3142
p0339 A78-35397
F33615-76-C-3145
p0464 A78-43541
F33615-76-C-3146
p0623 N78-33058
F33615-76-C-5072
p0247 N78-18138
F33615-76-C-5111
p0504 N78-29457
F33615-76-C-5137
p0330 A78-33168
F33615-76-R-0029
p0536 A78-49957
F33615-77-C-0116
p0502 N78-29106
F33615-77-C-1044
p0490 N78-28079
F33615-77-C-1121
p0538 A78-49987
F33615-77-C-1227
p0539 A78-49998
F33615-77-C-2062
p0462 A78-43512
F33615-77-C-3008
p0226 A78-26791
F33615-77-C-3011
p0630 N78-33120
F33615-77-C-3026
p0507 A78-46962
F33615-77-C-3041
p0541 A78-50186
F33615-77-C-3126
p0171 A78-22561
F33625-76-C-2018
p0322 N78-21146
F33657-72-C-0206
p0030 N78-10110
F33657-72-C-0829
p0404 N78-24900
F33657-74-C-0705
p0110 A78-17898
F33657-76-C-0792
p0015 A78-12695
F33657-77-C-0004
p0533 A78-49902
F33657-77-C-0189
p0532 A78-49876
F33657-15053
p0288 A78-31733
F40600-74-C-0009
p0237 N78-18007
F40600-76-C-0011
p0295 A78-32345
F41608-71-D-1383
p0091 N78-13000
p0091 N78-13001
p0092 N78-13002
F41609-75-C-0028
p0141 N78-14045
F44620-6-C-0044
p0158 A78-20685
F44620-71-C-0021
p0571 A78-50461
F44620-73-C-0032
p0076 A78-16810
F44620-73-C-0041
p0161 A78-20757
F44620-74-C-0040
p0615 N78-32391
F44620-74-C-0059
p0504 N78-29412
F44620-75-C-0051
p0080 N78-12019
F44620-76-C-0020
p0586 A78-51466
F44620-76-C-0049
p0498 N78-29069
F44620-76-C-0055
p0142 N78-14050
F44620-76-C-0062
p0423 A78-41888
F44620-76-C-0073
p0558 N78-31048
F44620-76-C-0118
p0044 N78-11127
p0044 N78-11128
F49620-76-C-0004
p0255 N78-19072
F49620-76-C-0037
p0183 A78-23900
F49620-77-C-0023
p0198 N78-16048
p0308 N78-20135
p0562 N78-31100
F49620-77-C-0024
p0352 N78-22106
F49620-77-C-0035
p0302 N78-20086
F49620-77-C-0044
p0462 A78-43512
p0503 N78-29188
F49620-77-C-0055
p0385 A78-39135
p0609 N78-32088
F49620-77-C-0066
p0502 N78-29107
F41421210
p0090 N78-12251
HUD-H-2196R
p0451 N78-27096
ISU PROJ. 1233
p0442 N78-26153
JPL-954492
p0633 N78-33405
MDA903-76-C-0220
p0612 N78-32103
MIPR-FQ-8952-76-66005
p0310 N78-20147
MIPR-FY-14557-601611
p0401 N78-24380
NASA ORDER A-36074-B
p0028 N78-10094
NASA ORDER A-36079-B(TS)
p0213 N78-17931
NASA ORDER C-41581-B
p0026 N78-10077
p0563 N78-31105
NASW-2483
p0038 N78-11061
NASW-2790
p0033 N78-11003
p0043 N78-11119
p0079 N78-12012
p0086 N78-12080
p0087 N78-12085
p0087 N78-12086
p0198 N78-16051
p0208 N78-17053
p0264 N78-19156
p0364 N78-23106
p0394 N78-24085
p0398 N78-24142
p0438 N78-26105
p0445 N78-26493
p0450 N78-27081
p0457 N78-27185
p0617 N78-32642
NASW-2791
p0042 N78-11114
p0240 N78-18041
p0252 N78-19053
p0312 N78-21048
p0393 N78-24084
p0396 N78-24116
NASW-2792
p0206 N78-17042
NASW-3075
p0213 N78-17915
NASW-3198
p0604 N78-32052
p0614 N78-32264
p0615 N78-32384
NASW-3199
p0603 N78-32043
p0605 N78-32054
p0616 N78-32027
p0631 N78-33140
NAS1-9559
p0102 N78-13851
NAS1-11441
p0194 N78-16015
NAS1-11621
p0354 N78-22161
NAS1-11668
p0022 N78-10047
p0044 N78-11199
NAS1-11707
p0197 N78-16046
NAS1-12185
p0161 A78-20762
NAS1-12287
p0197 N78-16043
p0305 N78-20112
p0306 N78-20116
NAS1-12680
p0013 A78-12358
NAS1-12954
p0339 A78-35445
NAS1-12972
p0194 N78-16002
NAS1-13029
p0004 A78-12073
NAS1-13267
p0304 N78-20102
NAS1-13383
p0013 A78-12358
NAS1-13500
p0087 N78-12089
p0235 N78-17994
p0312 N78-21053
p0405 N78-25054
p0495 N78-28830
p0543 N78-30045
p0604 N78-32047
p0626 N78-33087
NAS1-13502
p0484 A78-46550
NAS1-13624
p0195 N78-16026
p0235 N78-17990
p0316 N78-21093
p0498 N78-29082
p0499 N78-29083
NAS1-13649
p0101 N78-13478
NAS1-13654
p0143 N78-14055
NAS1-13694
p0592 A78-52626
NAS1-13795
p0194 N78-16003
p0203 N78-16998
NAS1-13842
p0495 N78-28861
NAS1-13847
p0065 A78-15642
NAS1-13870
p0027 N78-10091
p0391 N78-24061
p0391 N78-24062
p0446 N78-26880
p0460 N78-27870
NAS1-13871
p0390 N78-24057
NAS1-13914
p0013 A78-12362
p0309 N78-20141
NAS1-13932
p0080 N78-12019
NAS1-13938
p0113 A78-18058
NAS1-13981
p0200 N78-16066
p0306 N78-20118
NAS1-14000
p0360 N78-23080
NAS1-14005
p0206 N78-17037
NAS1-14086
p0544 N78-30050
NAS1-14140
p0306 N78-20117
NAS1-14144
p0064 A78-15633
NAS1-14151
p0484 A78-46558
NAS1-14192
p0404 N78-24903
NAS1-14204
p0079 N78-12013
p0203 N78-16999
NAS1-14216
p0487 N78-28054
NAS1-14284
p0303 N78-20094
NAS1-14307
p0173 A78-22589
p0270 N78-19801
NAS1-14311
p0542 A78-50203
p0021 N78-10042
NAS1-14317
p0019 N78-10020
p0019 N78-10021
p0019 N78-10022
NAS1-14402
p0312 N78-21047
NAS1-14406
p0420 A78-41832
NAS1-14409
p0218 A78-25200
NAS1-14413
p0197 N78-16044
NAS1-14462
p0464 A78-43542
NAS1-14503
p0356 N78-22861
NAS1-14517
p0364 N78-23105
NAS1-14522
p0476 A78-45149
p0301 N78-20076
p0301 N78-20077
NAS1-14570
p0543 N78-30042
p0543 N78-30043
p0543 N78-30044
NAS1-14611
p0446 N78-26881
NAS1-14614
p0560 N78-31085
p0560 N78-31086
NAS1-14624
p0609 N78-32087
NAS1-14625
p0625 N78-33086
NAS1-14631
p0449 N78-27071
NAS1-14644
p0251 N78-18797
NAS1-14686
p0389 N78-24043
NAS1-14696
p0495 N78-28887
NAS1-14707
p0173 A78-22579
NAS1-14732
p0172 A78-22576
NAS1-14741
p0496 N78-29050
NAS1-14742
p0174 A78-22590
NAS1-14743
p0496 N78-29049
NAS1-14744
p0497 N78-29052
NAS1-14756
p0544 N78-30051
NAS1-14794
p0422 A78-41882
NAS1-14795
p0413 N78-25985
NAS1-14797
p0251 N78-18874
NAS1-14849
p0544 N78-30048
p0544 N78-30049
NAS1-14855
p0173 A78-22589
NAS1-14859
p0258 N78-19096
NAS1-14908
p0406 N78-25068
NAS1-14939
p0398 N78-24132
NAS1-14973
p0412 N78-25831

NAS1-14981
p0212 N78-17339
NAS1-15003
p0613 N78-32185
p0613 N78-32186
NAS1-15005
p0613 N78-32188
NAS1-15145
p0610 N78-32094
NAS1-15155
p0608 N78-32079
NAS1-28611
p0613 N78-32187
NAS2-6690
p0297 A78-32368
NAS2-6901
p0463 A78-43525
NAS2-7091
p0629 N78-33113
p0629 N78-33114
p0629 N78-33115
p0629 N78-33116
p0629 N78-33117
p0629 N78-33118
NAS2-7187
p0323 N78-21161
NAS2-7729
p0593 A78-52628
p0593 A78-52630
p0020 N78-10027
p0450 N78-27087
NAS2-7738
p0625 N78-33085
NAS2-7806
p0052 A78-14063
NAS2-7850
p0172 A78-22570
p0209 N78-17063
NAS2-8048
p0022 N78-10046
p0095 N78-13038
p0095 N78-13039
NAS2-8364
p0030 N78-10115
NAS2-8583
p0599 A78-53674
NAS2-8606
p0152 N78-15058
NAS2-8612
p0316 N78-21095
NAS2-8618
p0020 N78-10035
NAS2-8671
p0092 N78-13007
NAS2-8680
p0319 N78-21115
NAS2-8699
p0324 N78-21223
NAS2-8734
p0511 A78-47907
NAS2-8745
p0297 A78-32368
NAS2-8790
p0490 N78-28083
NAS2-8799
p0182 A78-23883
NAS2-8832
p0411 N78-25359
NAS2-8862
p0452 N78-27105
NAS2-8878
p0463 A78-43525
NAS2-8889
p0504 N78-29699
p0612 N78-32106
NAS2-9050
p0546 N78-30070
NAS2-9104
p0287 A78-31306
NAS2-9112
p0209 N78-17061
NAS2-9155
p0297 A78-32368
p0092 N78-13008
NAS2-9168
p0171 A78-22554
p0171 A78-22555
NAS2-9176
p0352 N78-22100
NAS2-9211
p0405 N78-25057
NAS2-9242
p0197 N78-16045
NAS2-9302
p0441 N78-26149
NAS2-9310
p0024 N78-10060
NAS2-9311
p0005 A78-12243
p0024 N78-10061
NAS2-9312
p0271 N78-19899
NAS2-9337
p0036 N78-11042
NAS2-9357
p0636 N78-33876
NAS2-9374
p0308 N78-20136
p0309 N78-20137
p0309 N78-20138
NAS2-9392
p0348 N78-22071
NAS2-9399
p0311 N78-20917
p0311 N78-20918
NAS2-9418
p0396 N78-24117
NAS2-9421
p0030 N78-10117
NAS2-9456
p0252 N78-19050
p0252 N78-19051
NAS2-9457
p0252 N78-19052
NAS2-9506
p0348 N78-22074
NAS2-9549
p0030 N78-10116
NAS2-9640
p0209 N78-17062
p0252 N78-19049
NAS2-9748
p0257 N78-19094
NAS2-9750
p0455 N78-27128
NAS3-16726
p0361 N78-23089
NAS3-16732
p0216 A78-24902
p0322 N78-21147
NAS3-17343
p0459 N78-27429
NAS3-17863
p0311 N78-20920
NAS3-17866
p0235 N78-17991
p0313 N78-21058
p0621 N78-32836
NAS3-18008
p0487 N78-28043
p0491 N78-28094
p0491 N78-28095
p0491 N78-28096
p0492 N78-28097
NAS3-18021
p0106 A78-17396
p0183 A78-23893
p0184 A78-23918
NAS3-18523
p0616 N78-32433
NAS3-18526
p0627 N78-33103
NAS3-18538
p0407 N78-25080
NAS3-18926
p0247 N78-18131
NAS3-19080
p0035 N78-11024
NAS3-19424
p0086 N78-12081
p0086 N78-12082
NAS3-19447
p0150 N78-15041
NAS3-19540
p0038 N78-11062
NAS3-19544
p0097 N78-13058
NAS3-19737
p0097 N78-13057
NAS3-19738
p0012 A78-12307
NAS3-19747
p0461 A78-43415
NAS3-19770
p0141 N78-14047
NAS3-19898
p0455 N78-27129
NAS3-20031
p0028 N78-10093
NAS3-20044
p0628 N78-33104
NAS3-20047
p0209 N78-17064
p0209 N78-17065
p0209 N78-17066
NAS3-20050
p0422 A78-41852
NAS3-20051
p0325 N78-21471
NAS3-20052
p0412 N78-25827
p0412 N78-25829
NAS3-20056
p0459 N78-27427
NAS3-20070
p0501 N78-29099
NAS3-20073
p0086 N78-12083
NAS3-20074
p0041 N78-11081
NAS3-20099
p0198 N78-16052
NAS3-20219
p0606 N78-32066
NAS3-20292
p0097 N78-13059
NAS3-20368
p0633 N78-33478
NAS3-20378
p0027 N78-10092
NAS3-20479
p0563 N78-31106
NAS3-20580
p0465 A78-43546
p0611 N78-32097
NAS3-20581
p0492 N78-28098
NAS3-20588
p0465 A78-43568
NAS3-20598
p0212 N78-17390
NAS3-20608
p0245 N78-18070
NAS3-20610
p0351 N78-22096
NAS3-20613
p0610 N78-32096
NAS3-20620
p0266 N78-19326
p0410 N78-25235
NAS3-20627
p0563 N78-31108
NAS3-20629
p0475 A78-45098
NAS3-20630
p0475 A78-45097
NAS3-20631
p0475 A78-45098
p0446 N78-27049
p0501 N78-29103
NAS3-20632
p0475 A78-45097
p0446 N78-27050
p0454 N78-27124
p0501 N78-29105
p0551 N78-30121
NAS3-21032
p0208 N78-17058
NAS3-21033
p0198 N78-16054
NAS3-21041
p0501 N78-29104
NAS4-2248
p0349 N78-22076
NAS4-2272
p0265 N78-19166
NAS4-2364
p0551 N78-30123
p0551 N78-30124
p0551 N78-30125
p0551 N78-30126
p0552 N78-30127
p0552 N78-30128
p0552 N78-30129
p0552 N78-30130
p0552 N78-30131
NAS4-2378
p0236 N78-18000
NAS4-2391
p0501 N78-29101
p0501 N78-29102
NAS4-2409
p0007 A78-12252
NAS7-100
p0289 A78-31915
p0335 A78-34658
p0377 A78-37743
p0271 N78-19898
p0555 N78-30583
p0633 N78-33405
NAS8-2686
p0017 N78-10007
NAS8-5338
p0160 A78-20718
NAS8-11238
p0160 A78-20718
NAS8-20354
p0160 A78-20718
NAS8-28130
p0160 A78-20718
p0347 N78-22057
NAS8-29584
p0055 A78-14954
NAS8-30652
p0160 A78-20718
p0347 N78-22057
NAS8-31377
p0162 A78-20771
NAS8-32217
p0034 N78-11022
p0451 N78-27093
p0603 N78-32037
NAS8-32658
p0631 N78-33134
NAS8-32666
p0631 N78-33142
NAS9-14543
p0139 N78-14021
NAS9-14948
p0094 N78-13028
NAS9-14952
p0413 N78-25986
p0413 N78-25987
NAVAIR TASK AD3W-350D/004B
p0296 A78-32357
NAVSEA TASK SF32-302-41B
p0296 A78-32357
NAVSEA TASK SF32-399-592
p0296 A78-32357
NCA2-OR-745-602
p0346 N78-22055
NCA2-OR-745-720
p0413 N78-25979
NE PROJ. 061-226
p0137 N78-14001
NGL-05-002-229
p0422 A78-41887
NGL-05-020-007
p0225 A78-26785
p0542 A78-50202
p0019 N78-10017
NGL-05-020-243
p0385 A78-39135
p0502 N78-29110
NGL-10-005-127
p0377 A78-37744
NGL-33-016-119
p0017 N78-10006
p0018 N78-10011
p0018 N78-10012
NGL-36-008-138
p0524 A78-49427
p0153 N78-15324
NGL-39-009-172
p0409 N78-25092
NGL-47-003-039
p0317 N78-21096
NGL-49-002-044
p0528 A78-49781
NGR-05-003-451
p0071 A78-16180
NGR-05-017-031
p0207 N78-17050

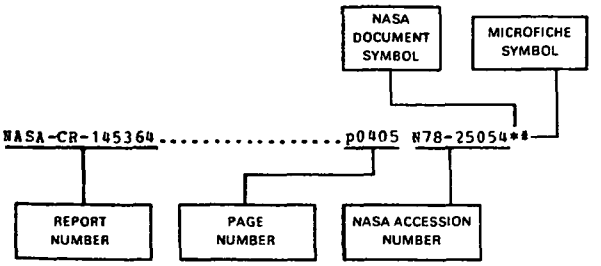
p0208 N78-17051
NGR-14-001-008
p0239 N78-18024
NGR-16-002-038
p0421 A78-41841
NGR-22-004-030
p0423 A78-41894
p0346 N78-22036
NGR-22-009-339
p0026 N78-10078
NGR-22-009-378
p0319 N78-21116
NGR-33-016-119
p0018 N78-10010
NGR-33-016-131
p0017 N78-10006
p0018 N78-10014
p0018 N78-10015
NGR-33-016-167
p0011 A78-12300
p0012 A78-12302
p0341 A78-35728
p0403 N78-24808
NGR-33-016-201
p0011 A78-12300
p0341 A78-35728
p0403 N78-24808
NGR-33-018-152
p0177 A78-23433
p0232 A78-28439
NGR-33-018-183
p0013 A78-12360
NGR-36-009-017
p0303 N78-20100
p0558 N78-31068
NGR-39-009-270
p0356 N78-22858
NGR-39-009-275
p0244 N78-18068
NGR-47-004-090
p0346 N78-22035
NGR-47-005-181
p0050 A78-13478
p0509 A78-47490
p0526 A78-49684
NGR-47-005-208
p0278 A78-29643
NGR-47-005-219-03
p0300 N78-20067
p0300 N78-20068
p0300 N78-20069
p0300 N78-20070
NGR-47-102-001
p0011 A78-12296
NGR-48-002-035
p0277 A78-29642
NIVR-1725
p0556 N78-30620
NIVR-1747
p0155 N78-15859
NIVR-1754
p0237 N78-18009
NIVR-1761
p0438 N78-26111
NIVR-1775
p0361 N78-23085
NIVR-1806
p0494 N78-28495
NOAA-04-4-158-1
p0239 N78-18024
NOAA-04-6-022-44031
p0635 N78-33692
NR PROJ. 207-007
p0083 N78-12051
NR PROJ. 212-225
p0205 N78-17028
NR PROJ. 215-246
p0034 N78-11013
NR PROJECT 062-431
p0001 A78-10600
NRC A-1894
p0055 A78-14961
NRC A-2746
p0221 A78-25777
NRC A-2938
p0115 A78-18637
NRC A-3378
p0592 A78-52616
NRC A-4310
p0481 A78-46354
p0600 A78-53764
NRC A-7934
p0055 A78-14961
p0353 N78-22112
NRC A-8927
p0229 A78-27542
NRC A-9185
p0279 A78-29785
NSC-66E-0401-02(01)
p0580 A78-50673
NSF AER-74-04014-A03
p0170 A78-22232
NSF C-724
p0450 N78-27086
NSF ENG-73-03855-A01
p0076 A78-16809
p0176 A78-23185
NSF ENG-75-22322
p0073 A78-16327
p0183 A78-23890
NSF ENG-76-03135
p0296 A78-32366
NSF ENG-76-07811
p0052 A78-14063
NSF GK-15251
p0168 A78-21635
NSF GK-37285
p0073 A78-16327
NSF GK-42159
p0502 N78-29107
NSF GK-42991
p0186 A78-24025
NSF MCS-76-07654
p0419 A78-41452
NSG-1018
p0013 A78-12359
NSG-1046
p0235 N78-17993
NSG-1050
p0285 A78-31019
NSG-1080
p0324 N78-21326
NSG-1107
p0405 N78-25056
NSG-1114
p0552 N78-30139
NSG-1128
p0609 N78-32080
NSG-1139
p0204 N78-17002
p0391 N78-24059
p0499 N78-29086
NSG-1161
p0483 A78-46541
NSG-1169
p0413 N78-25966
NSG-1213
p0200 N78-16064
NSG-1227
p0152 N78-15055
NSG-1229
p0305 N78-20109
NSG-1261
p0270 N78-19801
NSG-1266
p0278 A78-29777
NSG-1284
p0360 N78-23081
NSG-1298
p0589 A78-51816
NSG-1300
p0405 N78-25056
p0437 N78-26102
NSG-1301
p0514 A78-47925
p0567 N78-31873
p0567 N78-31874
NSG-1307
p0445 N78-26879
NSG-1315
p0483 A78-46536
NSG-1318
p0171 A78-22556
NSG-1338
p0345 N78-22020
NSG-1374
p0530 A78-49858
NSG-1391
p0270 N78-19801
NSG-1400
p0622 N78-33048
NSG-1421
p0305 N78-20110
p0305 N78-20111
NSG-1457
p0089 N78-12106
NSG-1474
p0621 N78-32834
NSG-2010
p0381 A78-38766
NSG-2039
p0371 A78-36596
NSG-2095
p0339 A78-35371
NSG-2112
p0475 A78-45127
NSG-2127
p0451 N78-27094
NSG-2140
p0313 N78-21059
NSG-2142
p0412 N78-25832
NSG-2145
p0406 N78-25078
NSG-2149
p0316 N78-21092
NSG-2152
p0294 A78-32330
p0442 N78-26153
NSG-2170
p0256 N78-19082
NSG-2171
p0225 A78-26599
NSG-2253
p0346 N78-22055
NSG-2319
p0422 A78-41887
NSG-3012
p0421 A78-41844
p0235 N78-17995
NSG-3045
p0013 A78-12557
p0171 A78-22551
NSG-3048
p0073 A78-16327
p0183 A78-23890
p0428 A78-43055
p0563 N78-31107
NSG-3117
p0483 A78-46537
NSG-3148
p0572 A78-50560
NSG-4002
p0542 A78-50209
NSG-4003
p0226 A78-26795
p0484 A78-46554
NSG-4005
p0142 N78-14054
NSG-4006
p0101 N78-13476
p0310 N78-20534
NSG-4009
p0633 N78-33444
NSG-7172
p0099 N78-13076
p0247 N78-18086
p0456 N78-27141
NSG-7266
p0545 N78-30069
N0019-76-C-0435
p0162 A78-20770
N00014-67-A-0037
p0001 A78-10600
N00014-67-0226-0005
p0010 A78-12290
N00014-72-C-0102
p0295 A78-32345
N00014-72-C-0327
p0099 N78-13075
N00014-72-C-0351
p0347 N78-22066
p0458 N78-27369
N00014-74-C-0151
p0148 N78-15015
N00014-74-C-0344
p0205 N78-17028
N00014-75-C-0249
p0424 A78-41904
p0137 N78-14001
N00014-75-C-0257
p0253 N78-19061
N00014-75-C-0432
p0030 N78-10114
N00014-75-C-0722
p0476 A78-45150
N00014-75-C-0932
p0484 A78-46559
N00014-75-C-1143
p0199 N78-16056
p0499 N78-29088
N00014-76-C-0170
p0504 N78-29705
N00014-76-C-0182
p0475 A78-45127
p0254 N78-19068
N00014-76-C-0246
p0573 A78-50580
N00014-76-C-0253
p0322 N78-21146
p0399 N78-24149
N00014-76-C-0420
p0182 A78-23883
N00014-76-C-0494
p0034 N78-11013
p0269 N78-19791
N00014-76-C-0540
p0194 N78-16021
N00014-76-C-0576
p0159 A78-20707
N00014-76-C-0742
p0295 A78-32344
N00014-76-C-0780
p0363 N78-23103
N00014-76-C-0802
p0024 N78-10066
N00014-77-C-0032
p0403 N78-24808
N00014-77-C-0052
p0295 A78-32345
N00014-77-C-0180
p0405 N78-25051
N00014-77-C-0253
p0083 N78-12051
N00014-77-C-0461
p0396 N78-24124
N00017-73-C-1418
p0148 N78-15012
N00017-75-C-0722
p0033 N78-11011
N00019-74-C-0273
p0332 A78-33633
N00019-75-C-0208
p0332 A78-33633
N00019-75-C-0378
p0045 N78-11238
N00019-75-C-0528
p0565 N78-31123
N00019-76-C-0143
p0242 N78-18055
N00019-76-C-0524
p0099 N78-13073
N00019-76-C-0555
p0254 N78-19067
N00019-76-C-0675
p0411 N78-25240
N00019-77-C-0299
p0632 N78-33311
N00019-77-C-0309
p0404 N78-25050
N00019-77-C-0495
p0561 N78-31093
N00140-75-C-0034
p0409 N78-25097
p0409 N78-25098
N00140-76-C-0383
p0402 N78-24556
N00140-77-C-0105
p0530 A78-49852
N00383-73-C-3318
p0250 N78-18441
N00600-76-C-1494
p0160 A78-20710
N33615-77-C-3011
p0125 A78-19442
N61331-76-M-4839
p0325 N78-21358
N61339-74-C-0081
p0134 A78-20481
N61339-74-C-0141
p0247 N78-18087
N61339-75-C-0009
p0152 N78-15061

N61339-75-C-0104
p0134 A78-20481
N61339-76-C-0034
p0212 N78-17082
N61339-76-C-0046
p0134 A78-20481
N62269-73-C-0906
p0314 N78-21068
N62269-75-C-0317
p0029 N78-10104
N62269-75-C-0326
p0090 N78-12299
N62269-75-C-0386
p0258 N78-19097
N62269-75-R-0372
p0258 N78-19098
N62269-76-C-0086
p0465 A78-43555
p0033 N78-11009
N62269-76-C-0104
p0364 N78-23152
N62269-76-C-0239
p0083 N78-12052
N62269-76-C-0289
p0083 N78-12053
N62269-76-C-0353
p0100 N78-13186
N62269-76-C-0355
p0355 N78-22165
N62269-76-C-0361
p0137 N78-14000
N62269-76-C-0370
p0484 A78-46552
N62269-76-C-0382
p0237 N78-18008
N62269-76-C-0390
p0551 N78-30120
N62269-76-C-0402
p0366 N78-23392
N62269-76-C-0429
p0614 N78-32235
N62269-76-C-0464
p0255 N78-19075
N62269-76-C-0493
p0082 N78-12047
N62269-77-C-0074
p0548 N78-30091
N62269-77-C-0138
p0325 N78-21363
N62269-77-C-0186
p0453 N78-27118
N62269-77-C-0561
p0540 A78-50161
N62269-77-M-3186
p0621 N78-32903
N62269-77-M-7197
p0614 N78-32273
ONERA-18,884/SAT,2/LL
p0541 A78-50194
PROJ. SQUID
p0199 N78-16056
p0499 N78-29088
PROJ. 034-241-012
p0559 N78-31074
PROJ. 989156
p0621 N78-32903
PROJECT SQUID
p0010 A78-12290
RF41411801
p0205 N78-17028
RNLAF-RB-KLU-1976.C12
p0445 N78-26507
RR0141184
p0030 N78-10114
p0034 N78-11013
RR02302001
p0194 N78-16023
SN/1170/012
p0556 N78-30910
p0557 N78-30911
SRI PROJ. 4364
p0211 N78-17078
T/RF-41/RF-410/41110
p0245 N78-18072
T/RF-41/RF-410/51082
p0243 N78-18057
T/RF-41/RF-410/51106
p0238 N78-18013
USDJ-DEA-76-20
p0111 A78-17908
W-7405-ENG-48
p0553 N78-30182
p0617 N78-32601
WF1451402
p0138 N78-14018
WF32300000
p0082 N78-12046
WF32323201
p0082 N78-12046
WF41400000
p0607 N78-32069
WF41411000
p0548 N78-30091
WF41421200
p0085 N78-12074
WF41433301
p0087 N78-12090
WF51523400
p0083 N78-12052
WF54593201
p0503 N78-29154
WI-77-3683-1
p0199 N78-16059
WR02302001
p0366 N78-23392
W1-77-5660-1
p0403 N78-24899
ZF54590001
p0631 N78-33197
ZF57571004
p0264 N78-19162
ZF61412001
p0085 N78-12074
136-13-01
p0450 N78-27079
141-95-01
p0633 N78-33444
154-451-01-4A
p0451 N78-27093
176-30-34-05
p0634 N78-33617
198-30-02
p0556 N78-30774
199-53-04
p0305 N78-20114
504-09-41-01
p0022 N78-10045
505-01-11
p0268 N78-19778
505-02-13-01
p0020 N78-10034
505-02-13-14
p0410 N78-25135
505-02-13-42
p0631 N78-33152
505-02-21-01
p0313 N78-21055
505-02-23-01
p0492 N78-28101
505-02-33-02
p0445 N78-26494
505-02-33-03
p0556 N78-30606
505-03-12
p0412 N78-25827
p0412 N78-25829
505-03-13-12
p0366 N78-23876
505-03-13-13
p0366 N78-23875
p0460 N78-27871
505-03-13-15
p0618 N78-32816
505-03-32
p0628 N78-33104
505-04 p0032 N78-11002
p0033 N78-11008
p0041 N78-11106
p0098 N78-13064
p0301 N78-20080
p0308 N78-20130
p0308 N78-20133
p0325 N78-21473
p0352 N78-22101
p0455 N78-27130
p0545 N78-30057
p0628 N78-33107
p0628 N78-33108
p0628 N78-33109
505-05 p0146 N78-14998
p0194 N78-16001
p0318 N78-21112
p0318 N78-21114
p0362 N78-23095
p0556 N78-30896
p0628 N78-33110
505-05-22
p0627 N78-33103
505-05-41-07
p0362 N78-23093
505-05-41-08
p0208 N78-17057
p0362 N78-23094
505-06-11
p0438 N78-26106
p0497 N78-29067
505-06-14-01
p0093 N78-13015
505-06-23-01
p0495 N78-28887
505-06-31
p0309 N78-20140
505-06-31-03
p0543 N78-30046
505-06-33-08
p0615 N78-32385
505-06-33-09
p0247 N78-18085
505-06-33-10
p0019 N78-10023
505-06-34
p0405 N78-25055
505-06-51-03-00
p0487 N78-28053
505-06-63-01
p0456 N78-27138
505-06-63-02
p0306 N78-20115
p0544 N78-30054
p0547 N78-30089
p0547 N78-30090
505-06-91
p0089 N78-12100
505-06-95-01
p0082 N78-12040
p0092 N78-13011
505-07-10
p0546 N78-30072
505-07-33-04
p0410 N78-25101
505-08 p0634 N78-33618
505-08-21
p0324 N78-21214
505-08-23-01
p0552 N78-30138
505-08-31-01
p0095 N78-13043
505-08-33-12
p0431 N78-26048
505-09-13-01
p0032 N78-10839
505-09-13-11
p0251 N78-18873
p0311 N78-20919
p0404 N78-24903
p0494 N78-28680
p0555 N78-30291
p0618 N78-32815
p0635 N78-33873
p0635 N78-33874
505-09-33-03
p0309 N78-20142
505-09-42
p0453 N78-27113
505-09-42-02
p0495 N78-28979
505-10-11
p0439 N78-26133
505-10-11-01
p0099 N78-13071
505-10-13-00
p0552 N78-30141
505-10-13-01
p0241 N78-18044
505-10-13-02
p0562 N78-31101
505-10-13-03
p0604 N78-32046
505-10-13-04
p0604 N78-32051
505-10-13-07
p0544 N78-30049
505-10-14
p0240 N78-18042
505-10-21
p0311 N78-20917
p0323 N78-21159
p0625 N78-33085
505-10-22
p0017 N78-10002
505-10-23
p0305 N78-20113
505-10-23-03
p0312 N78-21052
505-10-23-05
p0325 N78-21410
p0450 N78-27084
p0604 N78-32049
505-10-23-07
p0301 N78-20075
p0307 N78-20128
p0488 N78-28056
505-10-26-01
p0037 N78-11053
p0147 N78-15002
505-10-31
p0319 N78-21115
p0603 N78-32044
505-10-32
p0199 N78-16063
505-10-41
p0137 N78-13998
505-10-41-09
p0140 N78-14031
505-10-44-01
p0194 N78-15999
505-10-1307
p0544 N78-30048
505-11-12
p0095 N78-13037
505-11-13-01
p0604 N78-32050
p0623 N78-33051
505-11-13-02
p0302 N78-20081
p0358 N78-23052
505-11-13-03
p0604 N78-32048
505-11-13-04
p0406 N78-25060
505-11-15-02
p0020 N78-10030
p0093 N78-13016
505-11-16-07
p0235 N78-17993
p0544 N78-30056
505-11-16-08
p0299 N78-20063
p0299 N78-20064
p0299 N78-20065
505-11-21-02
p0146 N78-14997
505-11-21-03
p0194 N78-16000
505-11-22-01
p0082 N78-12041
p0301 N78-20079
505-11-23-02
p0081 N78-12037
p0456 N78-27136
505-11-23-03
p0405 N78-25058
p0606 N78-32067
505-11-23-04
p0345 N78-22028
505-11-23-05
p0437 N78-26096
505-11-23-06
p0543 N78-30039
505-11-23-13
p0300 N78-20071
p0300 N78-20072
p0487 N78-28052
p0622 N78-33050
505-11-24
p0358 N78-23056
505-11-24-02
p0092 N78-13014
p0442 N78-26392
505-11-31-02
p0081 N78-12038
p0197 N78-16042
p0366 N78-23389

505-11-33-00
p0405 N78-25059
505-11-33-01
p0557 N78-31045
505-11-41
p0079 N78-12011
p0199 N78-16062
505-11-41-05
p0033 N78-11004
505-11-54
p0623 N78-33054
506-26-08-00-21
p0437 N78-26101
506-26-23-01
p0152 N78-15060
506-26-33-03
p0544 N78-30053
510-54-03-01
p0635 N78-33776
510-56-01
p0324 N78-21223
511-55-01
p0150 N78-15041
512-51-02-03
p0309 N78-20143
513-52-01-09
p0318 N78-21104
513-52-01-16
p0451 N78-27100
513-52-01-17
p0024 N78-10062
p0097 N78-13054
513-52-01-31
p0094 N78-13029
513-52-13-52
p0309 N78-20139
513-52-13-53
p0359 N78-23070
513-53-05
p0239 N78-18025
p0303 N78-20098
513-53-06
p0363 N78-23100
514-54-04
p0551 N78-30123
p0551 N78-30124
p0551 N78-30125
p0551 N78-30126
p0552 N78-30127
p0552 N78-30128
p0552 N78-30129
p0552 N78-30130
p0552 N78-30131
514-55-03-21
p0095 N78-13042
515-51-11-01
p0406 N78-25071
p0608 N78-32075
515-52-10
p0622 N78-33043
515-52-13-52
p0608 N78-32076
516-50-23-01
p0358 N78-23047
p0405 N78-25054
p0407 N78-25079
p0412 N78-25545
p0450 N78-27085
p0495 N78-28830
p0496 N78-29046
p0543 N78-30040
p0543 N78-30045
p0626 N78-33087
516-51-01
p0323 N78-21160
516-51-04
p0605 N78-32055
516-53-03-14
p0364 N78-23105
516-53-03-21
p0557 N78-31043
521-71-01
p0623 N78-33053
716-01-02
p0563 N78-31108
738-01 p0308 N78-20132
742-73-01-14
p0393 N78-24078
p0393 N78-24079
p0393 N78-24080
743-01-12-03
p0022 N78-10049
p0037 N78-11052
743-03 p0098 N78-13063
743-04-13-01
p0309 N78-20144
p0453 N78-27111
p0551 N78-30122
743-04-13-02
p0312 N78-21053
p0547 N78-30087
p0622 N78-33047
743-04-31-01
p0301 N78-20078
743-05-04-01
p0250 N78-18459
744-01-01
p0446 N78-27043
745-01-01-01
p0095 N78-13041
760-17-01
p0019 N78-10019
p0345 N78-22025
761-72-02
p0441 N78-26151
767-73-01-04
p0393 N78-24077
791-40-11
p0316 N78-21094
791-40-13-01
p0147 N78-15001
p0406 N78-25069
p0604 N78-32047
p0624 N78-33061
791-40-41
p0316 N78-21092
953-36-00-00-72
p0613 N78-32177
992-21-01
p0496 N78-29044
992-21-01-90-01
p0240 N78-18043
992-22-08
p0498 N78-29068

REPORT/ACCESSION NUMBER INDEX

Typical Report/Accession Number Index Listing



Listings in this index are arranged alphanumerically by report number The issue and page number indicate the actual Supplement and page where the citation may be located The accession number denotes the number by which the citation is identified An asterisk (*) indicates that the item is a NASA report A pound sign (#) indicates that the item is available on microfiche

A-6712 ..... p0199 N78-16063*#
A-6973 ..... p0239 N78-18025*#
A-6974 ..... p0303 N78-20098*#
A-7068 ..... p0079 N78-12011*#
A-7096 ..... p0204 N78-17000*#
A-7121 ..... p0363 N78-23100*#
A-7134 ..... p0305 N78-20113*#
A-7141 ..... p0199 N78-16062*#
A-7161 ..... p0137 N78-13998*#
A-7214 ..... p0345 N78-22025*#
A-7219 ..... p0095 N78-13037*#
A-7221 ..... p0236 N78-17999*#
A-7227 ..... p0017 N78-10002*#
A-7232 ..... p0253 N78-19058*#
A-7246 ..... p0441 N78-26151*#
A-7262 ..... p0622 N78-33043*#
A-7291 ..... p0268 N78-19778*#
A-7301-PT-1 ..... p0240 N78-18043*#
A-7308 ..... p0487 N78-28053*#
A-7328 ..... p0253 N78-19056*#
A-7334 ..... p0324 N78-21214*#
A-7338 ..... p0271 N78-19868*#
A-7343 ..... p0453 N78-27113*#
A-7355 ..... p0311 N78-20917*#
A-7364 ..... p0316 N78-21094*#
A-7367 ..... p0323 N78-21159*#
A-7373 ..... p0406 N78-25071*#
A-7394 ..... p0497 N78-29067*#
A-7395 ..... p0438 N78-26106*#
A-7399 ..... p0556 N78-30774*#
A-7430 ..... p0496 N78-29044*#
A-7464 ..... p0498 N78-29068*#
A-7480 ..... p0439 N78-26133*#
A-7488 ..... p0446 N78-27043*#
A-7559 ..... p0608 N78-32075*#
A-7562 ..... p0495 N78-28979*#
A-7592 ..... p0546 N78-30072*#
A-7634 ..... p0603 N78-32044*#

AAAF-NT-77-06 ..... p0034 N78-11018 #
AAAF-NT-77-08 ..... p0034 N78-11019 #
AAAF-NT-77-24 ..... p0397 N78-24127 #
AAAF-NT-77-25 ..... p0397 N78-24128 #
AAAF-NT-77-26 ..... p0397 N78-24129 #
AAAF-NT-77-27 ..... p0397 N78-24130 #
AAAF-NT-77-28 ..... p0397 N78-24131 #
AAAF-NT-77-29 ..... p0351 N78-22092 #
AAAF-NT-77-31 ..... p0353 N78-22109 #
AAAF-NT-77-35 ..... p0403 N78-24587 #
AAAF-NT-77-36 ..... p0355 N78-22223 #
AAAF-NT-77-38 ..... p0355 N78-22170 #
AAAF-NT-77-40 ..... p0355 N78-22240 #
AAAF-NT-77-44 ..... p0355 N78-22383 #

AAE-TR-78-5 ..... p0622 N78-33048*#

AAS PAPER 78-005 ..... p0599 A78-53614 #
AAS 77-205 ..... p0371 A78-36706*
AAS 77-257 ..... p0371 A78-36721

AC-76-02 ..... p0099 N78-13069 #
AC-76-03 ..... p0102 N78-13634 #
AC-77-02 ..... p0353 N78-22110 #
AC-77-03 ..... p0250 N78-18595 #

AD-A033681 ..... p0302 N78-20088 #
AD-A037722 ..... p0311 N78-20635 #
AD-A037790 ..... p0196 N78-16038 #
AD-A038153 ..... p0196 N78-16037 #
AD-A039335 ..... p0311 N78-20632 #
AD-A039483 ..... p0195 N78-16028 #
AD-A039521 ..... p0310 N78-20631 #
AD-A039715 ..... p0199 N78-16059 #
AD-A039735 ..... p0311 N78-20636 #
AD-A040665/2 ..... p0032 N78-10343 #
AD-A041335/1 ..... p0043 N78-11120 #
AD-A041561 ..... p0022 N78-10043 #
AD-A041600 ..... p0145 N78-14691 #
AD-A041848 ..... p0028 N78-10100 #
AD-A042181 ..... p0043 N78-11124 #
AD-A042218 ..... p0021 N78-10039 #
AD-A042225 ..... p0043 N78-11123 #
AD-A042255 ..... p0031 N78-10124 #
AD-A042319 ..... p0029 N78-10104 #
AD-A042320/2 ..... p0024 N78-10063 #
AD-A042326/9 ..... p0034 N78-11022*#
AD-A042327/7 ..... p0031 N78-10119 #
AD-A042328/5 ..... p0021 N78-10037 #
AD-A042337 ..... p0021 N78-10038 #
AD-A042338 ..... p0022 N78-10051 #
AD-A042369 ..... p0037 N78-11054 #
AD-A042378 ..... p0029 N78-10101 #
AD-A042390 ..... p0029 N78-10102 #
AD-A042441 ..... p0042 N78-11108 #
AD-A042442 ..... p0195 N78-16025 #
AD-A042450 ..... p0033 N78-11009 #
AD-A042454 ..... p0024 N78-10064 #
AD-A042463 ..... p0042 N78-11107 #
AD-A042478/8 ..... p0019 N78-10024 #
AD-A042483 ..... p0023 N78-10053 #
AD-A042514/0 ..... p0031 N78-10342 #
AD-A042568 ..... p0017 N78-10003 #
AD-A042581 ..... p0022 N78-10052 #
AD-A042583 ..... p0042 N78-11115 #
AD-A042593 ..... p0030 N78-10113 #
AD-A042623/9 ..... p0030 N78-10118 #
AD-A042747 ..... p0020 N78-10033 #
AD-A042785 ..... p0206 N78-17044 #
AD-A042796/3 ..... p0021 N78-10040 #
AD-A042846/6 ..... p0021 N78-10041 #
AD-A042961 ..... p0213 N78-17943 #
AD-A043005 ..... p0044 N78-11126 #
AD-A043179 ..... p0031 N78-10120 #
AD-A043239 ..... p0044 N78-11128 #
AD-A043240 ..... p0044 N78-11127 #
AD-A043269/0 ..... p0020 N78-10036 #
AD-A043282 ..... p0042 N78-11110 #
AD-A043350 ..... p0044 N78-11201 #
AD-A043355 ..... p0024 N78-10066 #
AD-A043367 ..... p0032 N78-10873 #
AD-A043383 ..... p0043 N78-11116 #
AD-A043399 ..... p0030 N78-10114 #
AD-A043408 ..... p0029 N78-10108 #
AD-A043435 ..... p0032 N78-10609 #
AD-A043460 ..... p0033 N78-11011 #
AD-A043469 ..... p0045 N78-11236 #
AD-A043518 ..... p0034 N78-11013 #

AD-A043543 ..... p0029 N78-10107 #
AD-A043578 ..... p0031 N78-10126 #
AD-A043688 ..... p0029 N78-10109 #
AD-A043707 ..... p0038 N78-11055 #
AD-A043741 ..... p0045 N78-11238 #
AD-A043742 ..... p0030 N78-10110 #
AD-A043785 ..... p0354 N78-22117 #
AD-A043814 ..... p0037 N78-11050 #
AD-A043826 ..... p0033 N78-11012 #
AD-A043836 ..... p0201 N78-16074 #
AD-A043843 ..... p0045 N78-11251 #
AD-A043859 ..... p0043 N78-11122 #
AD-A043860 ..... p0042 N78-11112 #
AD-A043904 ..... p0090 N78-12281 #
AD-A043907 ..... p0036 N78-11044 #
AD-A043969 ..... p0084 N78-12070 #
AD-A043979 ..... p0043 N78-11117 #
AD-A044001 ..... p0017 N78-10004 #
AD-A044020 ..... p0085 N78-12075 #
AD-A044028 ..... p0084 N78-12067 #
AD-A044037 ..... p0024 N78-10059 #
AD-A044046 ..... p0023 N78-10058 #
AD-A044063 ..... p0088 N78-12093 #
AD-A044076 ..... p0096 N78-13044 #
AD-A044082 ..... p0088 N78-12094 #
AD-A044083 ..... p0088 N78-12095 #
AD-A044104 ..... p0085 N78-12071 #
AD-A044172 ..... p0087 N78-12091 #
AD-A044173 ..... p0084 N78-12068 #
AD-A044184 ..... p0079 N78-12001 #
AD-A044189 ..... p0083 N78-12057 #
AD-A044190 ..... p0023 N78-10057 #
AD-A044203 ..... p0041 N78-11105 #
AD-A044211 ..... p0083 N78-12056 #
AD-A044239 ..... p0042 N78-11113 #
AD-A044256 ..... p0037 N78-11045 #
AD-A044257 ..... p0023 N78-10056 #
AD-A044269/9 ..... p0099 N78-13079 #
AD-A044292 ..... p0023 N78-10055 #
AD-A044293 ..... p0084 N78-12069 #
AD-A044297 ..... p0083 N78-12055 #
AD-A044317 ..... p0037 N78-11046 #
AD-A044319 ..... p0023 N78-10054 #
AD-A044327 ..... p0025 N78-10067 #
AD-A044328/3 ..... p0099 N78-13078 #
AD-A044420 ..... p0088 N78-12092 #
AD-A044471 ..... p0087 N78-12090 #
AD-A044474 ..... p0084 N78-12064 #
AD-A044481 ..... p0083 N78-12053 #
AD-A044483 ..... p0083 N78-12052 #
AD-A044582 ..... p0090 N78-12109 #
AD-A044587 ..... p0089 N78-12107 #
AD-A044635 ..... p0085 N78-12072 #
AD-A044670 ..... p0082 N78-12044 #
AD-A044672 ..... p0088 N78-12096 #
AD-A044690 ..... p0082 N78-12042 #
AD-A044692 ..... p0091 N78-12379 #
AD-A044693 ..... p0091 N78-12387 #
AD-A044712 ..... p0085 N78-12073 #
AD-A044739 ..... p0090 N78-12299 #
AD-A044754 ..... p0085 N78-12074 #
AD-A044762 ..... p0090 N78-12251 #
AD-A044847 ..... p0083 N78-12051 #
AD-A044849 ..... p0083 N78-12062 #
AD-A044956 ..... p0086 N78-12079 #
AD-A044957 ..... p0082 N78-12046 #
AD-A045011 ..... p0090 N78-12342 #
AD-A045034 ..... p0085 N78-12077 #
AD-A045035 ..... p0086 N78-12078 #
AD-A045073 ..... p0093 N78-13020 #
AD-A045087 ..... p0087 N78-12087 #
AD-A045094 ..... p0096 N78-13047 #
AD-A045165 ..... p0100 N78-13081 #
AD-A045170 ..... p0096 N78-13046 #
AD-A045171 ..... p0089 N78-12102 #
AD-A045172 ..... p0089 N78-12101 #
AD-A045209 ..... p0198 N78-16050 #
AD-A045221 ..... p0099 N78-13073 #
AD-A045222 ..... p0097 N78-13055 #
AD-A045237 ..... p0096 N78-13045 #
AD-A045272/2 ..... p0144 N78-14183 #
AD-A045277 ..... p0096 N78-13049 #
AD-A045314 ..... p0087 N78-12088 #
AD-A045315 ..... p0082 N78-12047 #
AD-A045319 ..... p0091 N78-12381 #
AD-A045323 ..... p0091 N78-12343 #
AD-A045343 ..... p0090 N78-12335 #
AD-A045347 ..... p0100 N78-13080 #
AD-A045361 ..... p0103 N78-13918 #
AD-A045363 ..... p0096 N78-13048 #
AD-A045375 ..... p0097 N78-13052 #
AD-A045399 ..... p0091 N78-13000 #
AD-A045400 ..... p0092 N78-13002 #
AD-A045409 ..... p0102 N78-13857 #
AD-A045425 ..... p0622 N78-33049 #
AD-A045428 ..... p0093 N78-13021 #
AD-A045429 ..... p0083 N78-12050 #
AD-A045436 ..... p0101 N78-13452 #
AD-A045440 ..... p0099 N78-13072 #
AD-A045464 ..... p0102 N78-13640 #
AD-A045467 ..... p0101 N78-13235 #
AD-A045489 ..... p0100 N78-13186 #
AD-A045491 ..... p0098 N78-13066 #
AD-A045533 ..... p0095 N78-13036 #
AD-A045582 ..... p0098 N78-13065 #
AD-A045603 ..... p0099 N78-13075 #
AD-A045625 ..... p0091 N78-13001 #
AD-A045670 ..... p0101 N78-13446 #
AD-A045761 ..... p0097 N78-13050 #
AD-A045877 ..... p0102 N78-13482 #
AD-A045908 ..... p0153 N78-15294 #
AD-A045909 ..... p0145 N78-14411 #
AD-A045910 ..... p0140 N78-14038 #
AD-A045914 ..... p0144 N78-14173 #
AD-A045920 ..... p0144 N78-14347 #
AD-A045921 ..... p0145 N78-14348 #
AD-A045926 ..... p0147 N78-15006 #
AD-A045932 ..... p0143 N78-14150 #
AD-A045940 ..... p0139 N78-14022 #
AD-A045941 ..... p0144 N78-14212 #
AD-A045950 ..... p0147 N78-15007 #
AD-A045951 ..... p0137 N78-14000 #
AD-A045977 ..... p0196 N78-16035 #
AD-A046055 ..... p0142 N78-14050 #
AD-A046065 ..... p0141 N78-14045 #
AD-A046084 ..... p0137 N78-14001 #
AD-A046086 ..... p0148 N78-15008 #
AD-A046108 ..... p0143 N78-14057 #
AD-A046117 ..... p0138 N78-14018 #
AD-A046152 ..... p0140 N78-14035 #
AD-A046156 ..... p0138 N78-14017 #
AD-A046163 ..... p0143 N78-14056 #
AD-A046164 ..... p0139 N78-14023 #
AD-A046176 ..... p0140 N78-14037 #
AD-A046178 ..... p0137 N78-13999 #
AD-A046180 ..... p0154 N78-15521 #
AD-A046217 ..... p0154 N78-15712 #
AD-A046218 ..... p0154 N78-15713 #
AD-A046221 ..... p0151 N78-15048 #
AD-A046238 ..... p0142 N78-14051 #
AD-A046239/0 ..... p0200 N78-16068 #
AD-A046255 ..... p0142 N78-14049 #
AD-A046261 ..... p0143 N78-14058 #
AD-A046279 ..... p0149 N78-15032 #
AD-A046340 ..... p0151 N78-15052 #
AD-A046342 ..... p0148 N78-15015 #
AD-A046359 ..... p0148 N78-15012 #
AD-A046363 ..... p0149 N78-15025 #
AD-A046368 ..... p0149 N78-15031 #
AD-A046370 ..... p0149 N78-15030 #
AD-A046442 ..... p0140 N78-14033 #
AD-A046462 ..... p0201 N78-16075 #
AD-A046487 ..... p0153 N78-15368 #
AD-A046490 ..... p0150 N78-15034 #
AD-A046491 ..... p0150 N78-15036 #
AD-A046500 ..... p0150 N78-15038 #
AD-A046509 ..... p0139 N78-14026 #
AD-A046543 ..... p0195 N78-16027 #
AD-A046553 ..... p0150 N78-15037 #
AD-A046554 ..... p0149 N78-15029 #
AD-A046580 ..... p0139 N78-14029 #
AD-A046585 ..... p0151 N78-15053 #
AD-A046699 ..... p0152 N78-15061 #
AD-A046705 ..... p0153 N78-15239 #
AD-A046708 ..... p0153 N78-15284 #
AD-A046709 ..... p0150 N78-15039 #
AD-A046710 ..... p0148 N78-15010 #
AD-A046757 ..... p0139 N78-14028 #
AD-A046758 ..... p0139 N78-14025 #
AD-A046786 ..... p0151 N78-15050 #
AD-A046824 ..... p0153 N78-15287 #
AD-A046829 ..... p0201 N78-16245 #
AD-A046852 ..... p0149 N78-15033 #
AD-A047023 ..... p0199 N78-16058 #
AD-A047076 ..... p0199 N78-16056 #
AD-A047081 ..... p0399 N78-24146 #
AD-A047083 ..... p0195 N78-16024 #
AD-A047086 ..... p0194 N78-16021 #

AD-A047120 ..... p0201 N78-16071 #
AD-A047136 ..... p0200 N78-16070 #
AD-A047141 ..... p0193 N78-15992 #
AD-A047142 ..... p0202 N78-16372 #
AD-A047144 ..... p0256 N73-19080 #
AD-A047150 ..... p0194 N78-16023 #
AD-A047163 ..... p0198 N78-16049 #
AD-A047166 ..... p0200 N78-16069 #
AD-A047181 ..... p0198 N78-16048 #
AD-A047204 ..... p0201 N78-16073 #
AD-A047205 ..... p0201 N78-16072 #
AD-A047226 ..... p0193 N78-15991 #
AD-A047227 ..... p0193 N78-15993 #
AD-A047246 ..... p0195 N78-16029 #
AD-A047249 ..... p0195 N78-16030 #
AD-A047251 ..... p0200 N78-16067 #
AD-A047254 ..... p0196 N78-16031 #
AD-A047260 ..... p0202 N78-16376 #
AD-A047282 ..... p0199 N78-16057 #
AD-A047283 ..... p0200 N78-16065 #
AD-A047297 ..... p0197 N78-16047 #
AD-A047355 ..... p0401 N78-24380*#
AD-A047507 ..... p0211 N78-17080 #
AD-A047558 ..... p0307 N78-20123 #
AD-A047559 ..... p0307 N78-20124 #
AD-A047560 ..... p0306 N78-20120 #
AD-A047568 ..... p0306 N78-20121 #
AD-A047622/6 ..... p0257 N78-19090 #
AD-A047633 ..... p0303 N78-20096 #
AD-A047659 ..... p0211 N78-17079 #
AD-A047667 ..... p0209 N78-17067 #
AD-A047670 ..... p0196 N78-16032 #
AD-A047678 ..... p0210 N78-17072 #
AD-A047714 ..... p0212 N78-17398 #
AD-A047801 ..... p0207 N78-17046 #
AD-A047805 ..... p0205 N78-17025 #
AD-A047814 ..... p0210 N78-17073 #
AD-A047845 ..... p0212 N78-17084 #
AD-A047847 ..... p0205 N78-17034 #
AD-A047857 ..... p0207 N78-17045 #
AD-A047872 ..... p0210 N78-17069 #
AD-A047882 ..... p0210 N78-17068 #
AD-A047886 ..... p0244 N78-18063 #
AD-A047919 ..... p0212 N78-17082 #
AD-A047921 ..... p0205 N78-17026 #
AD-A047949 ..... p0243 N78-18061 #
AD-A047952 ..... p0205 N78-17028 #
AD-A047961 ..... p0258 N78-19099*#
AD-A047971 ..... p0242 N78-18053 #
AD-A047985 ..... p0211 N78-17078 #
AD-A047986 ..... p0248 N78-18272 #
AD-A047998 ..... p0244 N78-18064 #
AD-A048059 ..... p0248 N78-18188 #
AD-A048110 ..... p0236 N78-18002 #
AD-A048112 ..... p0211 N78-17077 #
AD-A048164 ..... p0207 N78-17047 #
AD-A048198 ..... p0243 N78-18062 #
AD-A048205 ..... p0249 N78-18321 #
AD-A048207 ..... p0249 N78-18319 #
AD-A048244 ..... p0250 N78-18441 #
AD-A048246 ..... p0206 N78-17035 #
AD-A048247 ..... p0206 N78-17036 #
AD-A048253 ..... p0247 N78-18138 #
AD-A048274 ..... p0236 N78-18001 #
AD-A048288 ..... p0239 N78-18027 #
AD-A048306 ..... p0239 N78-18026 #
AD-A048331 ..... p0244 N78-18065 #
AD-A048354 ..... p0239 N78-18021 #
AD-A048360 ..... p0246 N78-18078 #
AD-A048364 ..... p0266 N78-19208 #
AD-A048370 ..... p0253 N78-19062 #
AD-A048382 ..... p0264 N78-19162 #
AD-A048439 ..... p0253 N78-19061 #
AD-A048450 ..... p0237 N78-18008 #
AD-A048468 ..... p0258 N78-19097 #
AD-A048469 ..... p0258 N78-19098 #
AD-A048475 ..... p0247 N78-18158 #
AD-A048485 ..... p0242 N78-18055 #
AD-A048498 ..... p0247 N78-18087 #
AD-A048528 ..... p0237 N78-18006 #
AD-A048551 ..... p0245 N78-18071 #
AD-A048555 ..... p0236 N78-18003 #
AD-A048580 ..... p0242 N78-18054 #
AD-A048589/6 ..... p0303 N78-20099 #
AD-A048590 ..... p0245 N78-18069 #
AD-A048611 ..... p0248 N78-18264 #
AD-A048615 ..... p0237 N78-18007 #
AD-A048651 ..... p0237 N78-18004 #
AD-A048655 ..... p0248 N78-18226 #
AD-A048670 ..... p0239 N78-18022 #
AD-A048677 ..... p0237 N78-18005 #
AD-A048695 ..... p0254 N78-19064 #
AD-A048722 ..... p0239 N78-18023 #
AD-A048840 ..... p0254 N78-19065 #
AD-A048847 ..... p0260 N78-19121 #
AD-A048882 ..... p0261 N78-19123 #
AD-A048884 ..... p0310 N78-20147 #
AD-A048891 ..... p0261 N78-19124 #
AD-A048895 ..... p0265 N78-19168 #
AD-A048898 ..... p0254 N78-19069 #
AD-A048901 ..... p0260 N78-19122 #
AD-A048966 ..... p0254 N78-19071 #
AD-A048968 ..... p0254 N78-19070 #
AD-A048975 ..... p0256 N78-19084 #
AD-A048988 ..... p0256 N78-19085 #
AD-A048999 ..... p0255 N78-19077 #
AD-A049000 ..... p0255 N78-19078 #
AD-A049001 ..... p0255 N78-19079 #
AD-A049029 ..... p0324 N78-21170 #
AD-A049039 ..... p0265 N78-19163 #
AD-A049044 ..... p0265 N78-19167 #
AD-A049067 ..... p0265 N78-19164 #
AD-A049069 ..... p0255 N78-19074 #
AD-A049070 ..... p0271 N78-19849 #
AD-A049084 ..... p0255 N78-19075 #
AD-A049164 ..... p0254 N78-19067 #
AD-A049188 ..... p0254 N78-19068 #
AD-A049199 ..... p0255 N78-19072 #
AD-A049212 ..... p0271 N78-20011 #
AD-A049213 ..... p0271 N78-20012 #
AD-A049214 ..... p0271 N78-20010 #
AD-A049247 ..... p0266 N78-19169 #
AD-A049272 ..... p0255 N78-19076 #
AD-A049277 ..... p0257 N78-19089 #
AD-A049278 ..... p0266 N78-19170 #
AD-A049279 ..... p0267 N78-19362 #
AD-A049301 ..... p0256 N78-19081 #
AD-A049305 ..... p0559 N78-31075 #
AD-A049313 ..... p0267 N78-19517 #
AD-A049315 ..... p0257 N78-19088 #
AD-A049318 ..... p0261 N78-19125 #
AD-A049334 ..... p0308 N78-20134 #
AD-A049343 ..... p0255 N78-19073 #
AD-A049393 ..... p0319 N78-21117 #
AD-A049438 ..... p0312 N78-21045 #
AD-A049440 ..... p0324 N78-21165 #
AD-A049459 ..... p0317 N78-21097 #
AD-A049522 ..... p0323 N78-21162 #
AD-A049579 ..... p0317 N78-21098 #
AD-A049580 ..... p0323 N78-21163 #
AD-A049620 ..... p0313 N78-21060 #
AD-A049625 ..... p0306 N78-20119 #
AD-A049636 ..... p0302 N78-20087 #
AD-A049637 ..... p0303 N78-20095 #
AD-A049699 ..... p0325 N78-21363 #
AD-A049743 ..... p0314 N78-21066 #
AD-A049767 ..... p0314 N78-21068 #
AD-A049795 ..... p0325 N78-21358 #
AD-A049811/3 ..... p0348 N78-22069 #
AD-A049859 ..... p0318 N78-21105 #
AD-A049862 ..... p0324 N78-21166 #
AD-A049870 ..... p0304 N78-20102*#
AD-A049876 ..... p0317 N78-21102 #
AD-A049879/0 ..... p0354 N78-22116 #
AD-A049882 ..... p0304 N78-20101 #
AD-A049970/7 ..... p0354 N78-22118 #
AD-A049981 ..... p0317 N78-21101 #
AD-A050025 ..... p0313 N78-21061 #
AD-A050050/4 ..... p0360 N78-23074 #
AD-A050059 ..... p0324 N78-21164 #
AD-A050152 ..... p0317 N78-21099 #
AD-A050164 ..... p0317 N78-21100 #
AD-A050214 ..... p0307 N78-20125 #
AD-A050223 ..... p0310 N78-20148*#
AD-A050263 ..... p0310 N78-20524 #
AD-A050267 ..... p0302 N78-20083 #
AD-A050295 ..... p0302 N78-20086 #
AD-A050349 ..... p0308 N78-20135 #
AD-A050463 ..... p0307 N78-20122 #
AD-A050494 ..... p0352 N78-22103 #
AD-A050531 ..... p0347 N78-22068 #
AD-A050592 ..... p0349 N78-22081 #
AD-A050593 ..... p0352 N78-22104 #
AD-A050595 ..... p0355 N78-22165 #
AD-A050614 ..... p0354 N78-22120 #
AD-A050618 ..... p0353 N78-22113 #
AD-A050648 ..... p0352 N78-22106 #
AD-A050649 ..... p0349 N78-22080 #

AD-A050698 ..... p0355 N78-22211 #
AD-A050765 ..... p0345 N78-22021 #
AD-A050771 ..... p0355 N78-22285 #
AD-A050819 ..... p0349 N78-22078 #
AD-A050834 ..... p0349 N78-22079 #
AD-A050891 ..... p0345 N78-22032 #
AD-A050921 ..... p0502 N78-29111 #
AD-A050923 ..... p0324 N78-21234 #
AD-A051128 ..... p0395 N78-24105 #
AD-A051143 ..... p0546 N78-30071 #
AD-A051150 ..... p0402 N78-24385 #
AD-A051153 ..... p0359 N78-23071 #
AD-A051158 ..... p0364 N78-23108 #
AD-A051159 ..... p0396 N78-24120 #
AD-A051163 ..... p0361 N78-23083 #
AD-A051174 ..... p0400 N78-24154 #
AD-A051242 ..... p0364 N78-23109 #
AD-A051299 ..... p0399 N78-24143 #
AD-A051318 ..... p0396 N78-24118 #
AD-A051319 ..... p0396 N78-24119 #
AD-A051337 ..... p0398 N78-24133 #
AD-A051348 ..... p0396 N78-24122 #
AD-A051385 ..... p0394 N78-24090 #
AD-A051425 ..... p0394 N78-24089 #
AD-A051433 ..... p0359 N78-23064 #
AD-A051449 ..... p0365 N78-23235 #
AD-A051456 ..... p0360 N78-23075 #
AD-A051542 ..... p0366 N78-23438 #
AD-A051621 ..... p0400 N78-24155 #
AD-A051637 ..... p0363 N78-23102 #
AD-A051651 ..... p0400 N78-24153 #
AD-A051657 ..... p0364 N78-23152 #
AD-A051687 ..... p0364 N78-23107 #
AD-A051700 ..... p0403 N78-24899 #
AD-A051710 ..... p0367 N78-23986 #
AD-A051771 ..... p0493 N78-28279 #
AD-A051797 ..... p0359 N78-23060 #
AD-A051798 ..... p0361 N78-23087 #
AD-A051850 ..... p0363 N78-23103 #
AD-A051864 ..... p0363 N78-23101 #
AD-A051884 ..... p0358 N78-23059 #
AD-A051951 ..... p0395 N78-24107 #
AD-A051967 ..... p0360 N78-23082 #
AD-A051978 ..... p0359 N78-23062 #
AD-A051999 ..... p0367 N78-23879 #
AD-A052042 ..... p0362 N78-23097 #
AD-A052113 ..... p0367 N78-23981 #
AD-A052131 ..... p0366 N78-23392 #
AD-A052162 ..... p0365 N78-23285 #
AD-A052239 ..... p0404 N78-25050 #
AD-A052303 ..... p0407 N78-25081 #
AD-A052342 ..... p0402 N78-24418 #
AD-A052346 ..... p0399 N78-24145 #
AD-A052351 ..... p0402 N78-24556 #
AD-A052354 ..... p0396 N78-24124 #
AD-A052362 ..... p0457 N78-27144 #
AD-A052363 ..... p0439 N78-26123 #
AD-A052376 ..... p0413 N78-25970 #
AD-A052388 ..... p0404 N78-24999 #
AD-A052389 ..... p0389 N78-24042 #
AD-A052405 ..... p0398 N78-24135 #
AD-A052411 ..... p0399 N78-24150 #
AD-A052417 ..... p0394 N78-24096 #
AD-A052420 ..... p0399 N78-24144 #
AD-A052422 ..... p0394 N78-24098 #
AD-A052423 ..... p0399 N78-24149 #
AD-A052435 ..... p0504 N78-29699*#
AD-A052449 ..... p0394 N78-24094 #
AD-A052546 ..... p0458 N78-27313 #
AD-A052635 ..... p0403 N78-24557 #
AD-A052652 ..... p0400 N78-24158 #
AD-A052662 ..... p0411 N78-25466 #
AD-A052670 ..... p0397 N78-24125 #
AD-A052707 ..... p0400 N78-24159 #
AD-A052721 ..... p0401 N78-24320 #
AD-A052728 ..... p0395 N78-24102 #
AD-A052750 ..... p0409 N78-25096 #
AD-A052759 ..... p0397 N78-24126 #
AD-A052764 ..... p0407 N78-25082 #
AD-A052765 ..... p0401 N78-24348 #
AD-A052772 ..... p0452 N78-27104 #
AD-A052801 ..... p0400 N78-24156 #
AD-A052803 ..... p0453 N78-27112 #
AD-A052809 ..... p0401 N78-24344 #
AD-A052819 ..... p0458 N78-27311 #
AD-A052869 ..... p0439 N78-26136 #
AD-A052870 ..... p0452 N78-27103 #
AD-A052903 ..... p0413 N78-25974 #
AD-A053078 ..... p0407 N78-25084 #
AD-A053106 ..... p0410 N78-25239 #
AD-A053108 ..... p0408 N78-25085 #
AD-A053178 ..... p0451 N78-27093*#
AD-A053180 ..... p0405 N78-25051 #
AD-A053196 ..... p0408 N78-25086 #
AD-A053220 ..... p0440 N78-26137 #
AD-A053221 ..... p0443 N78-26449 #
AD-A053242 ..... p0458 N78-27314 #
AD-A053252 ..... p0442 N78-26202 #
AD-A053267 ..... p0439 N78-26135 #
AD-A053294 ..... p0452 N78-27101 #
AD-A053299 ..... p0411 N78-25240 #
AD-A053310 ..... p0440 N78-26141 #
AD-A053327 ..... p0408 N78-25087 #
AD-A053348 ..... p0407 N78-25083 #
AD-A053361 ..... p0409 N78-25097 #
AD-A053362 ..... p0409 N78-25098 #
AD-A053389 ..... p0494 N78-28484 #
AD-A053417 ..... p0499 N78-29088 #
AD-A053423 ..... p0499 N78-29089 #
AD-A053424 ..... p0459 N78-27432 #
AD-A053441 ..... p0456 N78-27139 #
AD-A053447 ..... p0500 N78-29097 #
AD-A053468 ..... p0490 N78-28085 #
AD-A053470 ..... p0490 N78-28084 #
AD-A053486 ..... p0491 N78-28093 #
AD-A053566 ..... p0492 N78-28277 #
AD-A053588 ..... p0499 N78-29087 #
AD-A053592 ..... p0492 N78-28278 #
AD-A053594 ..... p0490 N78-28079 #
AD-A053604 ..... p0487 N78-28051 #
AD-A053610 ..... p0492 N78-28276 #
AD-A053617 ..... p0500 N78-29091 #
AD-A053640 ..... p0502 N78-29110*#
AD-A053642 ..... p0458 N78-27295 #
AD-A053656 ..... p0503 N78-29112 #
AD-A053686 ..... p0492 N78-28275 #
AD-A053691 ..... p0498 N78-29069 #
AD-A053700 ..... p0495 N78-28889 #
AD-A053701 ..... p0495 N78-28888 #
AD-A053733 ..... p0453 N78-27115 #
AD-A053744 ..... p0504 N78-29412 #
AD-A053775 ..... p0453 N78-27118 #
AD-A053782 ..... p0453 N78-27114 #
AD-A053791 ..... p0455 N78-27134 #
AD-A053809 ..... p0450 N78-27089 #
AD-A053831 ..... p0457 N78-27278 #
AD-A053834 ..... p0455 N78-27133 #
AD-A053835 ..... p0459 N78-27456 #
AD-A053862 ..... p0460 N78-27628 #
AD-A053867 ..... p0455 N78-27132 #
AD-A053904 ..... p0459 N78-27455 #
AD-A053931 ..... p0458 N78-27369 #
AD-A053938 ..... p0452 N78-27106 #
AD-A053939 ..... p0450 N78-27088 #
AD-A053951 ..... p0458 N78-27337 #
AD-A053953 ..... p0460 N78-27979 #
AD-A053954 ..... p0459 N78-27457 #
AD-A054004 ..... p0455 N78-27131 #
AD-A054016 ..... p0550 N78-30119 #
AD-A054023 ..... p0504 N78-29509 #
AD-A054024 ..... p0500 N78-29094 #
AD-A054042 ..... p0504 N78-29457 #
AD-A054045 ..... p0504 N78-29458 #
AD-A054048 ..... p0500 N78-29095 #
AD-A054093 ..... p0548 N78-30092 #
AD-A054102 ..... p0500 N78-29093 #
AD-A054138 ..... p0495 N78-28893 #
AD-A054141 ..... p0490 N78-28081 #
AD-A054154 ..... p0490 N78-28082 #
AD-A054157 ..... p0498 N78-29077 #
AD-A054173 ..... p0502 N78-29107 #
AD-A054180 ..... p0545 N78-30058 #
AD-A054229 ..... p0553 N78-30259 #
AD-A054243 ..... p0557 N78-31046 #
AD-A054244 ..... p0546 N78-30078 #
AD-A054245 ..... p0489 N78-28077 #
AD-A054246 ..... p0491 N78-28092 #
AD-A054266 ..... p0499 N78-29085 #
AD-A054281 ..... p0548 N78-30091 #
AD-A054298 ..... p0546 N78-30075 #
AD-A054317 ..... p0499 N78-29084 #
AD-A054319 ..... p0504 N78-29705 #
AD-A054398 ..... p0503 N78-29188 #
AD-A054415 ..... p0493 N78-28296 #
AD-A054416 ..... p0500 N78-29092 #
AD-A054437 ..... p0551 N78-30120 #
AD-A054451 ..... p0489 N78-28071 #
AD-A054452 ..... p0489 N78-28072 #

AD-A054461 ..... p0553 N78-30213 #
AD-A054463 ..... p0548 N78-30093 #
AD-A054465 ..... p0503 N78-29262 #
AD-A054510 ..... p0489 N78-28075 #
AD-A054533 ..... p0502 N78-29108 #
AD-A054598 ..... p0548 N78-30094 #
AD-A054604 ..... p0493 N78-28295 #
AD-A054605 ..... p0488 N78-28070 #
AD-A054607 ..... p0493 N78-28297 #
AD-A054608 ..... p0489 N78-28076 #
AD-A054627 ..... p0553 N78-30247 #
AD-A054637 ..... p0503 N78-29154 #
AD-A054645 ..... p0489 N78-28073 #
AD-A054646 ..... p0489 N78-28074 #
AD-A054672 ..... p0502 N78-29106 #
AD-A054719 ..... p0500 N78-29098 #
AD-A054720 ..... p0503 N78-29113 #
AD-A054752 ..... p0552 N78-30142 #
AD-A054791 ..... p0614 N78-32321 #
AD-A054797 ..... p0607 N78-32069 #
AD-A054811 ..... p0547 N78-30088 #
AD-A054822 ..... p0547 N78-30079 #
AD-A054823 ..... p0547 N78-30080 #
AD-A054827 ..... p0548 N78-30095 #
AD-A054832 ..... p0563 N78-31112 #
AD-A054834 ..... p0562 N78-31100 #
AD-A054963 ..... p0607 N78-32068 #
AD-A054974 ..... p0614 N78-32199 #
AD-A055026 ..... p0558 N78-31064 #
AD-A055039 ..... p0561 N78-31091 #
AD-A055040 ..... p0561 N78-31092 #
AD-A055104 ..... p0560 N78-31089 #
AD-A055108 ..... p0564 N78-31113 #
AD-A055116 ..... p0564 N78-31119 #
AD-A055140 ..... p0558 N78-31047 #
AD-A055175 ..... p0564 N78-31120 #
AD-A055191 ..... p0560 N78-31077 #
AD-A055196 ..... p0565 N78-31121 #
AD-A055197 ..... p0567 N78-31335 #
AD-A055226 ..... p0566 N78-31133 #
AD-A055234 ..... p0565 N78-31122 #
AD-A055239 ..... p0560 N78-31078 #
AD-A055252 ..... p0611 N78-32099 #
AD-A055262 ..... p0563 N78-31111 #
AD-A055276 ..... p0611 N78-32100 #
AD-A055286 ..... p0558 N78-31048 #
AD-A055317 ..... p0559 N78-31071 #
AD-A055343 ..... p0561 N78-31095 #
AD-A055385 ..... p0612 N78-32109 #
AD-A055417 ..... p0612 N78-32107 #
AD-A055443 ..... p0614 N78-32235 #
AD-A055444 ..... p0615 N78-32330 #
AD-A055447 ..... p0559 N78-31070 #
AD-A055464 ..... p0630 N78-33124 #
AD-A055482 ..... p0566 N78-31130 #
AD-A055483 ..... p0617 N78-32504 #
AD-A055526 ..... p0625 N78-33071 #
AD-A055529 ..... p0559 N78-31074 #
AD-A055538 ..... p0611 N78-32102 #
AD-A055540 ..... p0610 N78-32092 #
AD-A055590 ..... p0568 N78-31952 #
AD-A055591 ..... p0562 N78-31102 #
AD-A055619 ..... p0615 N78-32392 #
AD-A055620 ..... p0615 N78-32391 #
AD-A055637 ..... p0610 N78-32091 #
AD-A055649 ..... p0565 N78-31124 #
AD-A055672 ..... p0562 N78-31098 #
AD-A055678 ..... p0559 N78-31073 #
AD-A055684 ..... p0614 N78-32270 #
AD-A055689 ..... p0613 N78-32169 #
AD-A055703 ..... p0610 N78-32090 #
AD-A055711 ..... p0621 N78-32911 #
AD-A055714 ..... p0631 N78-33197 #
AD-A055729 ..... p0621 N78-32903 #
AD-A055731 ..... p0614 N78-32273 #
AD-A055754 ..... p0564 N78-31118 #
AD-A055765 ..... p0564 N78-31115 #
AD-A055766 ..... p0564 N78-31114 #
AD-A055767 ..... p0607 N78-32071 #
AD-A055784 ..... p0561 N78-31094 #
AD-A055789 ..... p0562 N78-31097 #
AD-A055803 ..... p0610 N78-32093 #
AD-A055804 ..... p0608 N78-32077 #
AD-A055824 ..... p0561 N78-31096 #
AD-A055849 ..... p0566 N78-31134 #
AD-A055887 ..... p0561 N78-31093 #
AD-A055892 ..... p0565 N78-31123 #
AD-A055895 ..... p0612 N78-32103 #
AD-A055898 ..... p0560 N78-31088 #
AD-A055899 ..... p0558 N78-31052 #
AD-A055902 ..... p0618 N78-32754 #
AD-A055920 ..... p0559 N78-31072 #
AD-A055921 ..... p0607 N78-32070 #
AD-A055922 ..... p0609 N78-32089 #
AD-A055941 ..... p0609 N78-32088 #
AD-A055952 ..... p0607 N78-32072 #
AD-A055956 ..... p0615 N78-32327 #
AD-A055991 ..... p0611 N78-32101 #
AD-A056052 ..... p0566 N78-31131 #
AD-A056105 ..... p0627 N78-33098 #
AD-A056124 ..... p0626 N78-33088 #
AD-A056127 ..... p0609 N78-32084 #
AD-A056148 ..... p0567 N78-31325 #
AD-A056200 ..... p0566 N78-31132 #
AD-A056310 ..... p0629 N78-33111 #
AD-A056343 ..... p0623 N78-33055 #
AD-A056348 ..... p0627 N78-33097 #
AD-A056372 ..... p0633 N78-33483 #
AD-A056390 ..... p0630 N78-33128 #
AD-A056553 ..... p0626 N78-33089 #
AD-A056570 ..... p0635 N78-33677 #
AD-A056695 ..... p0631 N78-33132 #
AD-A056741 ..... p0625 N78-33075 #
AD-A056770 ..... p0630 N78-33119 #
AD-A056780 ..... p0624 N78-33063 #
AD-A056782 ..... p0633 N78-33413 #
AD-A056783 ..... p0628 N78-33105 #
AD-A056857 ..... p0626 N78-33095 #
AD-A056867 ..... p0624 N78-33062 #
AD-A056930 ..... p0625 N78-33072 #
AD-A056941 ..... p0625 N78-33070 #
AD-A056944 ..... p0627 N78-33099 #
AD-A056946 ..... p0623 N78-33058 #
AD-A056951 ..... p0626 N78-33093 #
AD-A056964 ..... p0626 N78-33092 #
AD-A056976 ..... p0626 N78-33094 #
AD-A056982 ..... p0630 N78-33120 #
AD-A057002 ..... p0622 N78-33036 #
AD-A057059 ..... p0624 N78-33068 #
AD-A057112 ..... p0625 N78-33069 #
AD-A057122 ..... p0625 N78-33073 #
AD-A057159 ..... p0627 N78-33100 #
AD-A057199 ..... p0632 N78-33313 #
AD-A057231 ..... p0626 N78-33091 #
AD-A057244 ..... p0632 N78-33311 #
AD-A057369 ..... p0634 N78-33655 #
AD-A057370 ..... p0628 N78-33106 #
AD-A057442 ..... p0632 N78-33290 #
AD-A057451 ..... p0634 N78-33615 #

AD-E000121 ..... p0399 N78-24143 #
AD-E000148 ..... p0457 N78-27278 #
AD-E000155 ..... p0503 N78-29154 #
AD-E300042 ..... p0248 N78-18272 #
AD-E300171 ..... p0494 N78-28494 #
AD-E300184 ..... p0490 N78-28085 #
AD-E300253 ..... p0630 N78-33128 #
AD-E400118 ..... p0397 N78-24125 #
AD-E500013 ..... p0400 N78-24156 #
AD-E500020 ..... p0398 N78-24133 #
AD-E500025 ..... p0550 N78-30119 #
AD-E500026 ..... p0491 N78-28093 #

AEDC-TR-77-66 ..... p0020 N78-10033 #
AEDC-TR-77-67 ..... p0100 N78-13090 #
AEDC-TR-77-70 ..... p0042 N78-11110 #
AEDC-TR-77-73 ..... p0205 N78-17026 #
AEDC-TR-77-75 ..... p0210 N78-17068 #
AEDC-TR-77-80 ..... p0029 N78-10107 #
AEDC-TR-77-89 ..... p0394 N78-24089 #
AEDC-TR-77-97 ..... p0359 N78-23060 #
AEDC-TR-77-104 ..... p0345 N78-22032 #
AEDC-TR-77-117 ..... p0607 N78-32068 #
AEDC-TR-77-10321-PT-2 ..... p0237 N78-18007 #
AEDC-TR-78-10 ..... p0450 N78-27088 #

AERO-1234 ..... p0090 N78-12251 #
AERO-1238 ..... p0033 N78-11012 #

AEWES-MP-H-76-3-9 ..... p0354 N78-22120 #

AEWES-TR-S-77-9 ..... p0144 N78-14183 #
AEWES-TR-S-77-11 ..... p0354 N78-22118 #

AFAL-TR-76-61-VOL-2 ..... p0249 N78-18321 #
AFAL-TR-76-190 ..... p0031 N78-10124 #
AFAL-TR-76-208-VOL-1 ..... p0198 N78-16049 #
AFAL-TR-77-18 ..... p0243 N78-18062 #

AFAL-TR-77-26 ..... p0249 N78-18319 #
AFAL-TR-77-64 ..... p0083 N78-12062 #
AFAL-TR-77-87 ..... p0618 N78-32754 #
AFAL-TR-77-90 ..... p0017 N78-10003 #
AFAL-TR-77-91 ..... p0243 N78-18061 #
AFAL-TR-77-110 ..... p0244 N78-18064 #
AFAL-TR-77-118-VOL-1 ..... p0562 N78-31102 #
AFAL-TR-77-167 ..... p0244 N78-18065 #
AFAL-TR-77-179 ..... p0627 N78-33097 #
AFAL-TR-77-190 ..... p0318 N78-21105 #
AFAL-TR-77-208 ..... p0490 N78-28079 #
AFAL-TR-78-59 ..... p0627 N78-33100 #

AFAPL-TR-75-10-VOL-3 ..... p0410 N78-25239 #
AFAPL-TR-75-52-SUPPL-1 ..... p0098 N78-13066 #
AFAPL-TR-76-81-VOL-1 ..... p0563 N78-31111 #
AFAPL-TR-76-81-VOL-2 ..... p0502 N78-29108 #
AFAPL-TR-76-115 ..... p0091 N78-12381 #
AFAPL-TR-77-8-VOL-1 ..... p0101 N78-13446 #
AFAPL-TR-77-15 ..... p0409 N78-25096 #
AFAPL-TR-77-16 ..... p0042 N78-11107 #
AFAPL-TR-77-20 ..... p0042 N78-11112 #
AFAPL-TR-77-22 ..... p0029 N78-10102 #
AFAPL-TR-77-24 ..... p0029 N78-10101 #
AFAPL-TR-77-33 ..... p0030 N78-10110 #
AFAPL-TR-77-35-VOL-1 ..... p0399 N78-24144 #
AFAPL-TR-77-35-VOL-2 ..... p0399 N78-24145 #
AFAPL-TR-77-40 ..... p0151 N78-15052 #
AFAPL-TR-77-48 ..... p0102 N78-13857 #
AFAPL-TR-77-56 ..... p0197 N78-16047 #
AFAPL-TR-77-58 ..... p0201 N78-16072 #
AFAPL-TR-77-61 ..... p0503 N78-29262 #
AFAPL-TR-77-62 ..... p0401 N78-24380*#
AFAPL-TR-77-66 ..... p0245 N78-18071 #
AFAPL-TR-77-77 ..... p0500 N78-29092 #
AFAPL-TR-77-79 ..... p0558 N78-31064 #
AFAPL-TR-77-83 ..... p0504 N78-29458 #

AFATL-TR-77-112 ..... p0302 N78-20083 #
AFATL-TR-77-129 ..... p0623 N78-33055 #

AFCEC-M-9-77 ..... p0303 N78-20095 #

AFCEC-TR-75-23 ..... p0030 N78-10118 #
AFCEC-TR-76-27 ..... p0310 N78-20147 #
AFCEC-TR-76-27-VOL-2 ..... p0324 N78-21170 #
AFCEC-TR-78-1 ..... p0324 N78-21165 #

AFFDL-TR-73-23-VOL-1 ..... p0089 N78-12102 #
AFFDL-TR-73-23-VOL-2 ..... p0089 N78-12101 #
AFFDL-TR-73-42-PT-2-VOL-2 ..... p0154 N78-15521 #
AFFDL-TR-74-68-VOL-1 ..... p0089 N78-12102 #
AFFDL-TR-74-68-VOL-2 ..... p0089 N78-12101 #
AFFDL-TR-76-45-VOL-1 ..... p0089 N78-12102 #
AFFDL-TR-76-45-VOL-2 ..... p0089 N78-12101 #
AFFDL-TR-76-107-VOL-1 ..... p0021 N78-10038 #
AFFDL-TR-76-107-VOL-2 ..... p0021 N78-10039 #
AFFDL-TR-76-112 ..... p0037 N78-11054 #
AFFDL-TR-76-113-VOL-2 ..... p0206 N78-17044 #
AFFDL-TR-76-125 ..... p0096 N78-13046 #
AFFDL-TR-76-133 ..... p0260 N78-19121 #
AFFDL-TR-76-156 ..... p0548 N78-30093 #
AFFDL-TR-76-162 ..... p0143 N78-14057 #
AFFDL-TR-77-9 ..... p0096 N78-13044 #
AFFDL-TR-77-12 ..... p0306 N78-20119 #
AFFDL-TR-77-23 ..... p0140 N78-14035 #
AFFDL-TR-77-24 ..... p0024 N78-10059 #
AFFDL-TR-77-30 ..... p0043 N78-11117 #
AFFDL-TR-77-33 ..... p0621 N78-32911 #
AFFDL-TR-77-36 ..... p0045 N78-11236 #
AFFDL-TR-77-37 ..... p0499 N78-29087 #
AFFDL-TR-77-39 ..... p0037 N78-11050 #
AFFDL-TR-77-40 ..... p0147 N78-15007 #
AFFDL-TR-77-46 ..... p0137 N78-13999 #
AFFDL-TR-77-54 ..... p0149 N78-15030 #
AFFDL-TR-77-56 ..... p0097 N78-13050 #
AFFDL-TR-77-57 ..... p0630 N78-33120 #
AFFDL-TR-77-58 ..... p0562 N78-31097 #
AFFDL-TR-77-63 ..... p0237 N78-18006 #
AFFDL-TR-77-65 ..... p0394 N78-24098 #
AFFDL-TR-77-72 ..... p0149 N78-15025 #
AFFDL-TR-77-73 ..... p0153 N78-15239 #
AFFDL-TR-77-77 ..... p0212 N78-17398 #
AFFDL-TR-77-78 ..... p0450 N78-27089 #
AFFDL-TR-77-79-VOL-1 ..... p0633 N78-33483 #
AFFDL-TR-77-79-VOL-3 ..... p0617 N78-32504 #
AFFDL-TR-77-80 ..... p0607 N78-32072 #
AFFDL-TR-77-81 ..... p0408 N78-25087 #
AFFDL-TR-77-82 ..... p0349 N78-22079 #
AFFDL-TR-77-87 ..... p0408 N78-25085 #
AFFDL-TR-77-88 ..... p0407 N78-25082 #
AFFDL-TR-77-89 ..... p0310 N78-20524 #
AFFDL-TR-77-91 ..... p0200 N78-16065 #
AFFDL-TR-77-92 ..... p0317 N78-21101 #
AFFDL-TR-77-101 ..... p0548 N78-30094 #
AFFDL-TR-77-112 ..... p0564 N78-31120 #
AFFDL-TR-77-118 ..... p0623 N78-33058 #
AFFDL-TR-77-119 ..... p0453 N78-27115 #
AFFDL-TR-77-122-VOL-1 ..... p0558 N78-31052 #
AFFDL-TR-77-124 ..... p0453 N78-27114 #
AFFDL-TR-77-125 ..... p0500 N78-29095 #
AFFDL-TR-77-135 ..... p0626 N78-33095 #
AFFDL-TR-77-136 ..... p0545 N78-30058 #
AFFDL-TR-77-139 ..... p0614 N78-32270 #
AFFDL-TR-78-6 ..... p0621 N78-32911 #
AFFDL-TR-78-16 ..... p0626 N78-33088 #

AFFTC-TIH-77-1-VOL-1-REV ..... p0042 N78-11115 #
AFFTC-TIH-77-1-VOL-2 ..... p0030 N78-10113 #

AFFTC-TR-76-36 ..... p0086 N78-12079 #

AFGL-TR-78-0025 ..... p0635 N78-33677 #

AFHRL-TR-77-2 ..... p0141 N78-14045 #
AFHRL-TR-77-31 ..... p0017 N78-10004 #
AFHRL-TR-77-33(1) ..... p0267 N78-19362 #
AFHRL-TR-77-45 ..... p0244 N78-18063 #
AFHRL-TR-77-46 ..... p0023 N78-10058 #
AFHRL-TR-77-48 ..... p0085 N78-12073 #
AFHRL-TR-77-50 ..... p0266 N78-19169 #
AFHRL-TR-77-67 ..... p0364 N78-23108 #
AFHRL-TR-77-70 ..... p0266 N78-19170 #

AFIT-CI-77-15 ..... p0210 N78-17073 #
AFIT-CI-78-53 ..... p0401 N78-24320 #

AFIT-LSSR-2-77B ..... p0193 N78-15993 #
AFIT-LSSR-7-77B ..... p0200 N78-16070 #
AFIT-LSSR-01-77A ..... p0088 N78-12095 #
AFIT-LSSR-10-77B ..... p0199 N78-16057 #
AFIT-LSSR-11-77A ..... p0088 N78-12094 #
AFIT-LSSR-13-77B ..... p0193 N78-15991 #
AFIT-LSSR-15-77A ..... p0083 N78-12056 #
AFIT-LSSR-19-77A ..... p0096 N78-13049 #
AFIT-LSSR-21-77B ..... p0303 N78-20096 #
AFIT-LSSR-22-77A ..... p0083 N78-12057 #
AFIT-LSSR-23-77A ..... p0084 N78-12068 #
AFIT-LSSR-29-77A ..... p0079 N78-12001 #
AFIT-LSSR-30-77A ..... p0023 N78-10057 #
AFIT-LSSR-31-77B ..... p0209 N78-17067 #
AFIT-LSSR-34-77A ..... p0087 N78-12091 #
AFIT-LSSR-36-77B ..... p0193 N78-15992 #

AFIT/EE/GGC/77-2 ..... p0560 N78-31078 #
AFIT/GA/AA/77D-8 ..... p0254 N78-19071 #
AFIT/GA/EE/77-3 ..... p0565 N78-31122 #
AFIT/GA/EE/77-5 ..... p0439 N78-26135 #
AFIT/GAE/AA/77D-2 ..... p0266 N78-19208 #
AFIT/GAE/AA/77D-7 ..... p0260 N78-19122 #
AFIT/GAE/AA/77D-10 ..... p0254 N78-19070 #
AFIT/GAE/AA/77D-11 ..... p0265 N78-19168 #
AFIT/GAE/AA/77D-13 ..... p0246 N78-18078 #
AFIT/GAE/AA/77D-14 ..... p0254 N78-19069 #
AFIT/GAE/AA/77D-15 ..... p0253 N78-19062 #
AFIT/GAE/AA/77D-17 ..... p0261 N78-19123 #
AFIT/GAE/AA/78M-16 ..... p0626 N78-33089 #
AFIT/GCS/EE/78-6 ..... p0566 N78-31133 #
AFIT/GCS/EE/78-8 ..... p0630 N78-33124 #
AFIT/GE/EE/77-11 ..... p0500 N78-29097 #
AFIT/GE/EE/77-13-VOL-2 ..... p0610 N78-32091 #
AFIT/GE/EE/77-39 ..... p0565 N78-31121 #
AFIT/GE/EE/77-41 ..... p0567 N78-31335 #
AFIT/GE/EE/77D-43 ..... p0440 N78-26137 #
AFIT/GE/MA/77-1 ..... p0207 N78-17047 #
AFIT/GGC/EE/77-5 ..... p0407 N78-25083 #
AFIT/GGC/EE/77-7 ..... p0612 N78-32107 #
AFIT/GGC/EE/77-8 ..... p0456 N78-27139 #
AFIT/GGC/EE/78-4 ..... p0560 N78-31077 #
AFIT/GOR/SM/77D-4 ..... p0345 N78-22021 #
AFIT/GSM/SM/77D-19 ..... p0413 N78-25974 #

AFLRL-85 ..... p0142 N78-14051 #
AFLRL-101 ..... p0553 N78-30259 #

AFML-TR-76-176 ..... p0088 N78-12092 #
AFML-TR-76-176-PT-2 ..... p0042 N78-11113 #
AFML-TR-77-90 ..... p0247 N78-18138 #

AFML-TR-77-101 ..... p0442 N78-26202 #
AFML-TR-77-102 ..... p0401 N78-24344 #
AFML-TR-77-163 ..... p0504 N78-29509 #
AFML-TR-77-171 ..... p0504 N78-29457 #
AFML-TR-77-195 ..... p0553 N78-30247 #
AFML-TR-77-198 ..... p0553 N78-30213 #
AFML-TR-77-206 ..... p0614 N78-32270 #

AFOSR-76-1422TR ..... p0302 N78-20088 #
AFOSR-77-0971TR ..... p0044 N78-11128 #
AFOSR-77-0990TR ..... p0044 N78-11127 #
AFOSR-77-1238TR ..... p0142 N78-14050 #
AFOSR-77-1306TR ..... p0255 N78-19072 #
AFOSR-78-0012TR ..... p0323 N78-21162 #
AFOSR-78-0111TR ..... p0302 N78-20086 #
AFOSR-78-0165TR ..... p0352 N78-22106 #
AFOSR-78-0679TR ..... p0399 N78-24150 #
AFOSR-78-0696TR ..... p0502 N78-29107 #
AFOSR-78-0697TR ..... p0459 N78-27457 #
AFOSR-78-0758TR ..... p0498 N78-29069 #
AFOSR-78-0788TR ..... p0459 N78-27455 #
AFOSR-78-0855TR ..... p0504 N78-29412 #
AFOSR-78-0856TR ..... p0502 N78-29110*#
AFOSR-78-0878TR ..... p0503 N78-29188 #
AFOSR-78-0903TR ..... p0558 N78-31043 #
AFOSR-78-1008TR ..... p0614 N78-32199 #
AFOSR-78-1027TR ..... p0615 N78-32392 #
AFOSR-78-1028TR ..... p0564 N78-31118 #
AFOSR-78-1054TR ..... p0565 N78-31124 #
AFOSR-78-1055TR ..... p0615 N78-32391 #
AFOSR-78-1115TR ..... p0609 N78-32088 #
AFOSR-78-1220TR ..... p0633 N78-33413 #

AGARD-AG-220 ..... p0353 N78-22111 #
AGARD-AG-226 ..... p0017 N78-10005 #
AGARD-AG-230 ..... p0094 N78-13032 #
AGARD-AG-231 ..... p0241 N78-18046 #

AGARD-AR-92 ..... p0242 N78-18051 #
AGARD-AR-101-VOL-1 ..... p0151 N78-15054 #
AGARD-AR-108 ..... p0438 N78-26115 #
AGARD-AR-109 ..... p0142 N78-14052 #
AGARD-AR-110 ..... p0141 N78-14048 #
AGARD-AR-113 ..... p0211 N78-17075 #
AGARD-AR-114 ..... p0207 N78-17049 #
AGARD-AR-115 ..... p0452 N78-27109 #
AGARD-AR-116 ..... p0455 N78-27135 #
AGARD-AR-119 ..... p0351 N78-22093 #
AGARD-AR-123 ..... p0612 N78-32104 #
AGARD-AR-124 ..... p0612 N78-32105 #
AGARD-AR-125 ..... p0608 N78-32074 #

AGARD-CP-214 ..... p0041 N78-11083 #
AGARD-CP-220 ..... p0314 N78-21071 #
AGARD-CP-227 ..... p0345 N78-22033 #
AGARD-CP-229 ..... p0087 N78-12086*#
AGARD-CP-229 ..... p0319 N78-21118 #
AGARD-CP-233 ..... p0261 N78-19126 #
AGARD-CP-234 ..... p0443 N78-26460 #
AGARD-CP-240 ..... p0431 N78-26049 #
AGARD-CP-241 ..... p0549 N78-30099 #
AGARD-CP-242 ..... p0434 N78-26074 #

AGARD-LS-91 ..... p0045 N78-11391 #

AGARD-R-661 ..... p0153 N78-15311 #
AGARD-R-663 ..... p0211 N78-17074 #
AGARD-R-664 ..... p0207 N78-17048 #
AGARD-R-665 ..... p0211 N78-17076 #
AGARD-R-667 ..... p0491 N78-28088 #
AGARD-R-668 ..... p0565 N78-31126 #

AIAA PAPER 76-945 ..... p0071 A78-16183 #
AIAA PAPER 77-178 ..... p0593 A78-52629 #
AIAA PAPER 77-1077 ..... p0385 A78-39183 #
AIAA PAPER 77-1195 ..... p0333 A78-34014 #
AIAA PAPER 77-1269 ..... p0001 A78-10416 #
AIAA PAPER 77-1273 ..... p0130 A78-19978 #
AIAA PAPER 78-3 ..... p0171 A78-22551*#
AIAA PAPER 78-4 ..... p0157 A78-20627 #
AIAA PAPER 78-11 ..... p0171 A78-22553*#
AIAA PAPER 78-13 ..... p0157 A78-20632*#
AIAA PAPER 78-15 ..... p0593 A78-52628*#
AIAA PAPER 78-18 ..... p0171 A78-22554*#
AIAA PAPER 78-23 ..... p0171 A78-22555*#
AIAA PAPER 78-37 ..... p0157 A78-20647 #
AIAA PAPER 78-38 ..... p0157 A78-20648*#
AIAA PAPER 78-40 ..... p0171 A78-22556*#
AIAA PAPER 78-43 ..... p0157 A78-20651*#
AIAA PAPER 78-44 ..... p0157 A78-20652 #
AIAA PAPER 78-45 ..... p0171 A78-22558 #
AIAA PAPER 78-58 ..... p0171 A78-22561 #
AIAA PAPER 78-62 ..... p0158 A78-20663 #
AIAA PAPER 78-63 ..... p0158 A78-20664 #
AIAA PAPER 78-93 ..... p0158 A78-20683*#
AIAA PAPER 78-94 ..... p0172 A78-22570*#
AIAA PAPER 78-95 ..... p0172 A78-22571 #
AIAA PAPER 78-96 ..... p0592 A78-52626*#
AIAA PAPER 78-97 ..... p0172 A78-22572 #
AIAA PAPER 78-98 ..... p0158 A78-20684 #
AIAA PAPER 78-99 ..... p0223 A78-26274*#
AIAA PAPER 78-100 ..... p0172 A78-22573 #
AIAA PAPER 78-102 ..... p0172 A78-22575*#
AIAA PAPER 78-103 ..... p0158 A78-20685 #
AIAA PAPER 78-104 ..... p0172 A78-22576*#
AIAA PAPER 78-105 ..... p0158 A78-20686*#
AIAA PAPER 78-106 ..... p0172 A78-22577 #
AIAA PAPER 78-107 ..... p0158 A78-20687*#
AIAA PAPER 78-109 ..... p0173 A78-22578*#
AIAA PAPER 78-110 ..... p0173 A78-22579*#
AIAA PAPER 78-141 ..... p0159 A78-20701*#
AIAA PAPER 78-142 ..... p0159 A78-20702*#
AIAA PAPER 78-144 ..... p0173 A78-22584 #
AIAA PAPER 78-145 ..... p0159 A78-20704 #
AIAA PAPER 78-147 ..... p0173 A78-22586 #
AIAA PAPER 78-148 ..... p0173 A78-22587 #
AIAA PAPER 78-149 ..... p0159 A78-20705*#
AIAA PAPER 78-150 ..... p0159 A78-20706*#
AIAA PAPER 78-151 ..... p0173 A78-22588 #
AIAA PAPER 78-152 ..... p0159 A78-20707 #
AIAA PAPER 78-153 ..... p0173 A78-22589*#
AIAA PAPER 78-154 ..... p0159 A78-20708*#
AIAA PAPER 78-155 ..... p0160 A78-20709 #
AIAA PAPER 78-156 ..... p0174 A78-22590*#
AIAA PAPER 78-157 ..... p0160 A78-20710 #
AIAA PAPER 78-160 ..... p0160 A78-20713*#
AIAA PAPER 78-164 ..... p0160 A78-20716 #
AIAA PAPER 78-165 ..... p0160 A78-20717 #
AIAA PAPER 78-166 ..... p0160 A78-20718*#
AIAA PAPER 78-167 ..... p0160 A78-20719 #
AIAA PAPER 78-197 ..... p0160 A78-20739*#
AIAA PAPER 78-205 ..... p0161 A78-20743 #
AIAA PAPER 78-209 ..... p0161 A78-20746 #
AIAA PAPER 78-226 ..... p0161 A78-20755 #
AIAA PAPER 78-227 ..... p0161 A78-20756 #
AIAA PAPER 78-228 ..... p0161 A78-20757 #
AIAA PAPER 78-229 ..... p0593 A78-52630*#
AIAA PAPER 78-235 ..... p0161 A78-20759 #
AIAA PAPER 78-239 ..... p0161 A78-20762*#
AIAA PAPER 78-240 ..... p0162 A78-20763*#
AIAA PAPER 78-242 ..... p0162 A78-20765 #
AIAA PAPER 78-246 ..... p0162 A78-20769 #
AIAA PAPER 78-247 ..... p0162 A78-20770 #
AIAA PAPER 78-249 ..... p0162 A78-20771*#
AIAA PAPER 78-254 ..... p0162 A78-20774*#
AIAA PAPER 78-268 ..... p0162 A78-20781 #
AIAA PAPER 78-269 ..... p0163 A78-20782 #
AIAA PAPER 78-270 ..... p0163 A78-20783 #
AIAA PAPER 78-284 ..... p0163 A78-20791 #
AIAA PAPER 78-285 ..... p0163 A78-20792 #
AIAA PAPER 78-305 ..... p0184 A78-24007 #
AIAA PAPER 78-307 ..... p0184 A78-24008 #
AIAA PAPER 78-308 ..... p0184 A78-24009 #
AIAA PAPER 78-309 ..... p0185 A78-24010 #
AIAA PAPER 78-310 ..... p0185 A78-24011 #
AIAA PAPER 78-311 ..... p0185 A78-24012 #
AIAA PAPER 78-312 ..... p0185 A78-24013 #
AIAA PAPER 78-322 ..... p0185 A78-24016 #
AIAA PAPER 78-323 ..... p0185 A78-24017 #
AIAA PAPER 78-324 ..... p0185 A78-24018 #
AIAA PAPER 78-328 ..... p0186 A78-24022 #
AIAA PAPER 78-331 ..... p0186 A78-24025 #
AIAA PAPER 78-337 ..... p0275 A78-29295*#
AIAA PAPER 78-356 ..... p0186 A78-24031 #
AIAA PAPER 78-357 ..... p0186 A78-24032 #
AIAA PAPER 78-361 ..... p0186 A78-24033 #
AIAA PAPER 78-362 ..... p0186 A78-24034 #
AIAA PAPER 78-363 ..... p0186 A78-24035 #
AIAA PAPER 78-756 ..... p0292 A78-32176 #
AIAA PAPER 78-922 ..... p0461 A78-43501 #
AIAA PAPER 78-924 ..... p0462 A78-43502 #
AIAA PAPER 78-925 ..... p0462 A78-43503 #
AIAA PAPER 78-926 ..... p0519 A78-48451 #
AIAA PAPER 78-927 ..... p0474 A78-45095*#
AIAA PAPER 78-928 ..... p0519 A78-48452*#
AIAA PAPER 78-929 ..... p0475 A78-45098*#
AIAA PAPER 78-930 ..... p0475 A78-45097*#
AIAA PAPER 78-931 ..... p0462 A78-43504*#

AIAA PAPER 78-932 ..... p0462 A78-43505*#
AIAA PAPER 78-933 ..... p0519 A78-48453*#
AIAA PAPER 78-934 ..... p0519 A78-48454 #
AIAA PAPER 78-935 ..... p0519 A78-48455 #
AIAA PAPER 78-937 ..... p0520 A78-48456 #
AIAA PAPER 78-944 ..... p0462 A78-43512 #
AIAA PAPER 78-949 ..... p0462 A78-43514 #
AIAA PAPER 78-956 ..... p0463 A78-43519 #
AIAA PAPER 78-958 ..... p0463 A78-43520*#
AIAA PAPER 78-959 ..... p0463 A78-43521*#
AIAA PAPER 78-961 ..... p0474 A78-45096*#
AIAA PAPER 78-962 ..... p0463 A78-43522 #
AIAA PAPER 78-964 ..... p0463 A78-43523 #
AIAA PAPER 78-970 ..... p0463 A78-43525*#
AIAA PAPER 78-989 ..... p0520 A78-48469 #
AIAA PAPER 78-990 ..... p0520 A78-48470*#
AIAA PAPER 78-992 ..... p0463 A78-43540*#
AIAA PAPER 78-993 ..... p0464 A78-43541 #
AIAA PAPER 78-994 ..... p0520 A78-48471 #
AIAA PAPER 78-995 ..... p0464 A78-43542*#
AIAA PAPER 78-996 ..... p0464 A78-43543 #
AIAA PAPER 78-997 ..... p0464 A78-43544*#
AIAA PAPER 78-998 ..... p0464 A78-43545 #
AIAA PAPER 78-999 ..... p0465 A78-43546*#
AIAA PAPER 78-1000 ..... p0465 A78-43547 #
AIAA PAPER 78-1020 ..... p0520 A78-48481 #
AIAA PAPER 78-1021 ..... p0465 A78-43555 #
AIAA PAPER 78-1022 ..... p0520 A78-48482 #
AIAA PAPER 78-1023 ..... p0465 A78-43556*#
AIAA PAPER 78-1025 ..... p0520 A78-48483 #
AIAA PAPER 78-1038 ..... p0465 A78-43566 #
AIAA PAPER 78-1039 ..... p0465 A78-43567*#
AIAA PAPER 78-1040 ..... p0465 A78-43568*#
AIAA PAPER 78-1049 ..... p0466 A78-43574 #
AIAA PAPER 78-1050 ..... p0466 A78-43575 #
AIAA PAPER 78-1051 ..... p0521 A78-48486 #
AIAA PAPER 78-1052 ..... p0521 A78-48487 #
AIAA PAPER 78-1053 ..... p0521 A78-48488 #
AIAA PAPER 78-1054 ..... p0466 A78-43576 #
AIAA PAPER 78-1078 ..... p0521 A78-48494 #
AIAA PAPER 78-1079 ..... p0521 A78-48495 #
AIAA PAPER 78-1080 ..... p0521 A78-48496 #
AIAA PAPER 78-1081 ..... p0466 A78-43587*#
AIAA PAPER 78-1082 ..... p0466 A78-43588 #
AIAA PAPER 78-1083 ..... p0466 A78-43589*#
AIAA PAPER 78-1084 ..... p0522 A78-48497 #
AIAA PAPER 78-1085 ..... p0466 A78-43590 #
AIAA PAPER 78-1087 ..... p0467 A78-43591 #
AIAA PAPER 78-1088 ..... p0467 A78-43592 #
AIAA PAPER 78-1089 ..... p0467 A78-43593 #
AIAA PAPER 78-1109 ..... p0522 A78-48499 #
AIAA PAPER 78-1114 ..... p0475 A78-45127*#
AIAA PAPER 78-1115 ..... p0475 A78-45128 #
AIAA PAPER 78-1118 ..... p0420 A78-41828 #
AIAA PAPER 78-1121 ..... p0420 A78-41831*#
AIAA PAPER 78-1122 ..... p0420 A78-41832*#
AIAA PAPER 78-1136 ..... p0421 A78-41840 #
AIAA PAPER 78-1137 ..... p0421 A78-41841*#
AIAA PAPER 78-1138 ..... p0421 A78-41842 #
AIAA PAPER 78-1140 ..... p0421 A78-41843*#
AIAA PAPER 78-1141 ..... p0421 A78-41844*#
AIAA PAPER 78-1144 ..... p0421 A78-41845 #
AIAA PAPER 78-1149 ..... p0421 A78-41849 #
AIAA PAPER 78-1151 ..... p0421 A78-41851 #
AIAA PAPER 78-1152 ..... p0476 A78-45134 #
AIAA PAPER 78-1153 ..... p0422 A78-41852*#
AIAA PAPER 78-1183 ..... p0422 A78-41876 #
AIAA PAPER 78-1184 ..... p0422 A78-41877 #
AIAA PAPER 78-1189 ..... p0422 A78-41882*#
AIAA PAPER 78-1194 ..... p0422 A78-41885*#
AIAA PAPER 78-1195 ..... p0422 A78-41886*#
AIAA PAPER 78-1196 ..... p0422 A78-41887*#
AIAA PAPER 78-1197 ..... p0423 A78-41888 #
AIAA PAPER 78-1198 ..... p0476 A78-45138 #
AIAA PAPER 78-1200 ..... p0423 A78-41890 #
AIAA PAPER 78-1201 ..... p0423 A78-41891*#
AIAA PAPER 78-1202 ..... p0423 A78-41892*#
AIAA PAPER 78-1203 ..... p0423 A78-41893 #
AIAA PAPER 78-1204 ..... p0423 A78-41894*#
AIAA PAPER 78-1206 ..... p0476 A78-45143 #
AIAA PAPER 78-1210 ..... p0424 A78-41897 #
AIAA PAPER 78-1221 ..... p0424 A78-41902 #
AIAA PAPER 78-1222 ..... p0424 A78-41903 #
AIAA PAPER 78-1223 ..... p0476 A78-45148*#
AIAA PAPER 78-1224 ..... p0476 A78-45149*#
AIAA PAPER 78-1225 ..... p0424 A78-41904 #
AIAA PAPER 78-1226 ..... p0476 A78-45150 #
AIAA PAPER 78-1445 ..... p0510 A78-47901 #
AIAA PAPER 78-1448 ..... p0511 A78-47903 #
AIAA PAPER 78-1450 ..... p0511 A78-47904*#
AIAA PAPER 78-1451 ..... p0528 A78-49782 #
AIAA PAPER 78-1452 ..... p0528 A78-49783 #
AIAA PAPER 78-1454 ..... p0511 A78-47905 #
AIAA PAPER 78-1455 ..... p0511 A78-47906 #
AIAA PAPER 78-1456 ..... p0511 A78-47907*#
AIAA PAPER 78-1457 ..... p0511 A78-47908 #
AIAA PAPER 78-1458 ..... p0591 A78-52042 #
AIAA PAPER 78-1459 ..... p0511 A78-47909 #
AIAA PAPER 78-1460 ..... p0512 A78-47910 #
AIAA PAPER 78-1461 ..... p0512 A78-47911 #
AIAA PAPER 78-1462 ..... p0512 A78-47912 #
AIAA PAPER 78-1463 ..... p0512 A78-47913 #
AIAA PAPER 78-1465 ..... p0512 A78-47914 #
AIAA PAPER 78-1466 ..... p0512 A78-47915 #
AIAA PAPER 78-1467 ..... p0528 A78-49784 #
AIAA PAPER 78-1468 ..... p0512 A78-47916*#
AIAA PAPER 78-1470 ..... p0528 A78-49786 #
AIAA PAPER 78-1471 ..... p0513 A78-47917 #
AIAA PAPER 78-1472 ..... p0513 A78-47918 #
AIAA PAPER 78-1473 ..... p0513 A78-47919 #
AIAA PAPER 78-1474 ..... p0513 A78-47920 #
AIAA PAPER 78-1475 ..... p0513 A78-47921 #
AIAA PAPER 78-1476 ..... p0528 A78-49787*#
AIAA PAPER 78-1477 ..... p0513 A78-47922*#
AIAA PAPER 78-1478 ..... p0513 A78-47923 #
AIAA PAPER 78-1479 ..... p0514 A78-47924*#
AIAA PAPER 78-1480 ..... p0514 A78-47925*#
AIAA PAPER 78-1481 ..... p0514 A78-47926*#
AIAA PAPER 78-1482 ..... p0514 A78-47927*#
AIAA PAPER 78-1483 ..... p0514 A78-47928 #
AIAA PAPER 78-1484 ..... p0528 A78-49781*#
AIAA PAPER 78-1485 ..... p0514 A78-47929*#
AIAA PAPER 78-1487 ..... p0514 A78-47930*#
AIAA PAPER 78-1488 ..... p0514 A78-47931 #
AIAA PAPER 78-1489 ..... p0514 A78-47932 #
AIAA PAPER 78-1492 ..... p0515 A78-47933 #
AIAA PAPER 78-1493 ..... p0515 A78-47934 #
AIAA PAPER 78-1494 ..... p0515 A78-47935 #
AIAA PAPER 78-1495 ..... p0515 A78-47936 #
AIAA PAPER 78-1496 ..... p0515 A78-47937 #
AIAA PAPER 78-1498 ..... p0515 A78-47938 #
AIAA PAPER 78-1499 ..... p0515 A78-47939*#
AIAA PAPER 78-1500 ..... p0515 A78-47940 #
AIAA PAPER 78-1501 ..... p0516 A78-47941 #
AIAA PAPER 78-1504 ..... p0516 A78-47942 #
AIAA PAPER 78-1505 ..... p0529 A78-49788 #
AIAA PAPER 78-1507 ..... p0516 A78-47943 #
AIAA PAPER 78-1509 ..... p0516 A78-47945 #
AIAA PAPER 78-1510 ..... p0529 A78-49789 #
AIAA PAPER 78-1511 ..... p0516 A78-47946*#
AIAA PAPER 78-1512 ..... p0516 A78-47947*#
AIAA PAPER 78-1515 ..... p0529 A78-49790*#
AIAA PAPER 78-1526 ..... p0481 A78-46502 #
AIAA PAPER 78-1528 ..... p0481 A78-46503*#
AIAA PAPER 78-1533 ..... p0527 A78-49769 #
AIAA PAPER 78-1539 ..... p0482 A78-46511 #
AIAA PAPER 78-1545 ..... p0528 A78-49770 #
AIAA PAPER 78-1551 ..... p0482 A78-46514*#
AIAA PAPER 78-1552 ..... p0482 A78-46515 #
AIAA PAPER 78-1553 ..... p0528 A78-49771 #
AIAA PAPER 78-1637 ..... p0591 A78-51977 #
AIAA 77-1389 ..... p0014 A78-12661 #
AIAA 77-1415 ..... p0014 A78-12677 #
AIAA 77-1440 ..... p0014 A78-12694 #
AIAA 77-1441 ..... p0015 A78-12695 #
AIAA 77-1468 ..... p0004 A78-12227*#
AIAA 77-1469 ..... p0005 A78-12228 #
AIAA 77-1470 ..... p0005 A78-12229 #
AIAA 77-1472 ..... p0005 A78-12230 #
AIAA 77-1474 ..... p0005 A78-12231 #
AIAA 77-1475 ..... p0005 A78-12232 #
AIAA 77-1477 ..... p0005 A78-12234 #
AIAA 77-1479 ..... p0009 A78-12275 #
AIAA 77-1480 ..... p0009 A78-12276 #
AIAA 77-1481 ..... p0009 A78-12283 #
AIAA 77-1482 ..... p0009 A78-12277 #
AIAA 77-1488 ..... p0005 A78-12238 #
AIAA 77-1494 ..... p0005 A78-12243*#
AIAA 77-1496 ..... p0006 A78-12244 #
AIAA 77-1497 ..... p0006 A78-12245 #
AIAA 77-1498 ..... p0006 A78-12246 #
AIAA 77-1499 ..... p0006 A78-12247 #
AIAA 77-1500 ..... p0006 A78-12248 #
AIAA 77-1502 ..... p0009 A78-12280 #
AIAA 77-1503 ..... p0006 A78-12250 #
AIAA 77-1504 ..... p0006 A78-12251 #
AIAA 77-1506 ..... p0007 A78-12252*#
AIAA 77-1507 ..... p0007 A78-12253*#

AIAA 77-1508 ..... p0007 A78-12254 #
AIAA 77-1509 ..... p0007 A78-12255 #
AIAA 77-1511 ..... p0007 A78-12256 #
AIAA 77-1512 ..... p0007 A78-12257 #
AIAA 77-1513 ..... p0007 A78-12258 #
AIAA 77-1514 ..... p0008 A78-12259 #
AIAA 77-1515 ..... p0008 A78-12260 #
AIAA 77-1516 ..... p0010 A78-12284 #
AIAA 77-1517 ..... p0010 A78-12285 #
AIAA 77-1521 ..... p0008 A78-12262 #
AIAA 77-1522 ..... p0008 A78-12263 #
AIAA 77-1524 ..... p0008 A78-12264 #
AIAA 77-1525 ..... p0008 A78-12265 #
AIAA 77-1527 ..... p0009 A78-12281 #
AIAA 77-1528 ..... p0008 A78-12267 #
AIAA 77-1529 ..... p0008 A78-12268 #
AIAA 77-1531 ..... p0009 A78-12282 #
AIAA 77-1553 ..... p0051 A78-13684 #
AIAA 77-1554 ..... p0051 A78-13652 #
AIAA 77-1560 ..... p0051 A78-13685 #
AIAA 78-465 ..... p0280 A78-29822 #
AIAA 78-466 ..... p0278 A78-29777*#
AIAA 78-477 ..... p0279 A78-29785 #
AIAA 78-487 ..... p0279 A78-29794 #
AIAA 78-501 ..... p0280 A78-29820 #
AIAA 78-503 ..... p0279 A78-29805 #
AIAA 78-505 ..... p0279 A78-29806 #
AIAA 78-509 ..... p0279 A78-29809 #
AIAA 78-512 ..... p0279 A78-29811 #
AIAA 78-513 ..... p0279 A78-29812 #
AIAA 78-581 ..... p0328 A78-32921 #
AIAA 78-766 ..... p0293 A78-32327 #
AIAA 78-767 ..... p0294 A78-32328 #
AIAA 78-768 ..... p0294 A78-32329*#
AIAA 78-769 ..... p0294 A78-32330*#
AIAA 78-770 ..... p0294 A78-32331*#
AIAA 78-771 ..... p0294 A78-32332*#
AIAA 78-773 ..... p0294 A78-32333 #
AIAA 78-775 ..... p0294 A78-32334 #
AIAA 78-781 ..... p0295 A78-32340 #
AIAA 78-784 ..... p0295 A78-32342 #
AIAA 78-785 ..... p0295 A78-32343 #
AIAA 78-786 ..... p0295 A78-32344 #
AIAA 78-789 ..... p0295 A78-32346 #
AIAA 78-801 ..... p0295 A78-32356 #
AIAA 78-802 ..... p0296 A78-32357 #
AIAA 78-805 ..... p0296 A78-32359*#
AIAA 78-806 ..... p0296 A78-32360 #
AIAA 78-809 ..... p0296 A78-32363 #
AIAA 78-810 ..... p0296 A78-32364 #
AIAA 78-811 ..... p0296 A78-32365*#
AIAA 78-812 ..... p0296 A78-32366 #
AIAA 78-813 ..... p0297 A78-32367 #
AIAA 78-814 ..... p0297 A78-32368*#
AIAA 78-817 ..... p0297 A78-32371*#
AIAA 78-818 ..... p0297 A78-32372 #
AIAA 78-819 ..... p0297 A78-32373 #
AIAA 78-826 ..... p0298 A78-32388 #
AIAA 78-830 ..... p0297 A78-32381 #
AIAA 78-835 ..... p0298 A78-32386*#
AIAA 78-1237 ..... p0540 A78-50160 #
AIAA 78-1238 ..... p0540 A78-50161 #
AIAA 78-1240 ..... p0540 A78-50162 #
AIAA 78-1243 ..... p0540 A78-50163 #
AIAA 78-1269 ..... p0540 A78-50179 #
AIAA 78-1271 ..... p0540 A78-50181 #
AIAA 78-1272 ..... p0540 A78-50182 #
AIAA 78-1273 ..... p0541 A78-50183 #
AIAA 78-1274 ..... p0541 A78-50184 #
AIAA 78-1276 ..... p0541 A78-50185 #
AIAA 78-1277 ..... p0541 A78-50186 #
AIAA 78-1279 ..... p0541 A78-50187 #
AIAA 78-1286 ..... p0541 A78-50193 #
AIAA 78-1287 ..... p0541 A78-50194 #
AIAA 78-1288 ..... p0542 A78-50195*#
AIAA 78-1289 ..... p0542 A78-50196 #
AIAA 78-1293 ..... p0542 A78-50200*#
AIAA 78-1295 ..... p0542 A78-50202*#
AIAA 78-1296 ..... p0542 A78-50203*#
AIAA 78-1308 ..... p0542 A78-50209*#
AIAA 78-1326 ..... p0482 A78-46527 #
AIAA 78-1328 ..... p0482 A78-46528*#
AIAA 78-1332 ..... p0482 A78-46530*#
AIAA 78-1333 ..... p0482 A78-46531 #
AIAA 78-1335 ..... p0483 A78-46533 #
AIAA 78-1338 ..... p0483 A78-46535 #
AIAA 78-1339 ..... p0483 A78-46536*#
AIAA 78-1340 ..... p0483 A78-46537*#
AIAA 78-1342 ..... p0483 A78-46539*#
AIAA 78-1343 ..... p0483 A78-46540*#
AIAA 78-1344 ..... p0483 A78-46541*#
AIAA 78-1346 ..... p0485 A78-46563 #
AIAA 78-1361 ..... p0484 A78-46550*#
AIAA 78-1362 ..... p0484 A78-46551 #
AIAA 78-1363 ..... p0484 A78-46552 #
AIAA 78-1364 ..... p0484 A78-46553*#
AIAA 78-1365 ..... p0484 A78-46554*#
AIAA 78-1371 ..... p0484 A78-46558*#
AIAA 78-1372 ..... p0484 A78-46559 #
AIAA 78-1373 ..... p0485 A78-46561 #
AIAA 78-1375 ..... p0485 A78-46560*#
AIAA 78-1578 ..... p0579 A78-50659 #
AIAA 78-1579 ..... p0579 A78-50660 #
AIAA 78-1580 ..... p0579 A78-50661 #
AIAA 78-1581 ..... p0579 A78-50671 #
AIAA 78-1583 ..... p0579 A78-50662 #
AIAA 78-1595 ..... p0579 A78-50669 #

AIAA-PAPER-73-1034 ..... p0018 N78-10012*#
AIAA-PAPER-74-160 ..... p0018 N78-10014*#
AIAA-PAPER-75-254 ..... p0017 N78-10006*#
AIAA-PAPER-78-999 ..... p0440 N78-26143*#
AIAA-PAPER-78-1121 ..... p0403 N78-24897*#

AIRESEARCH-21-2391 ..... p0086 N78-12083*#
AIRESEARCH-21-2817 ..... p0628 N78-33104*#
AIRESEARCH-31-2491B ..... p0400 N78-24158 #
AIRESEARCH-41-1803A ..... p0265 N78-19163 #
AIRESEARCH-41-1810A ..... p0360 N78-23082 #
AIRESEARCH-77-14332 ..... p0439 N78-26136 #
AIRESEARCH-77-14376 ..... p0317 N78-21097 #

AISR/376 ..... p0247 N78-18087 #

AMA-77-3 ..... p0021 N78-10042*#

AMMRC-CTR-77-21 ..... p0355 N78-22211 #

AMMRC-MS-77-5 ..... p0102 N78-13482 #
AMMRC-MS-78-2 ..... p0401 N78-24348 #

AMMRC-TR-78-14-VOL-1 ..... p0611 N78-32099 #
AMMRC-TR-78-14-VOL-2 ..... p0611 N78-32100 #

AMRL-TR-73-110-VOL-2 ..... p0495 N78-28889 #
AMRL-TR-73-110-VOL-3 ..... p0495 N78-28888 #
AMPL-TR-75-50-VOL-83 ..... p0495 N78-28893 #
AMRL-TR-75-123 ..... p0100 N78-13081 #
AMRL-TR-77-75-ADD ..... p0271 N78-19849 #
AMRL-TR-77-76 ..... p0265 N78-19164 #
AMRL-TR-77-84 ..... p0609 N78-32084 #

AMS-TR-1318 ..... p0395 N78-24099 #
AMS-TR-1339 ..... p0082 N78-12047 #
AMS-TR-1351 ..... p0255 N78-19075 #
AMS-TR-1363 ..... p0548 N78-30091 #

AMS-1325 ..... p0565 N78-31123 #

APCA PAPER 77-41,4 ..... p0220 A78-25385
APCA PAPER 77-41,5 ..... p0220 A78-25384
APCA PAPER 77-41,6 ..... p0220 A78-25391

AR-2 ..... p0044 N78-11199*#
AR-2 ..... p0503 N78-29154 #
AR-3 ..... p0022 N78-10047*#
AR-3 ..... p0205 N78-17028 #
AR-4 ..... p0354 N78-22161*#
AR-000-244 ..... p0437 N78-26095 #
AR-000-724 ..... p0553 N78-30271 #
AR-000-734 ..... p0562 N78-31104 #
AR-000-887 ..... p0451 N78-27092
AR-000-933 ..... p0147 N78-15005 #

ARBRL-CR-00358 ..... p0407 N78-25081 #

ARC-CP-1377 ..... p0100 N78-13084 #
ARC-CP-1379 ..... p0093 N78-13024 #
ARC-CP-1391 ..... p0545 N78-30066 #
ARC-CP-1392 ..... p0545 N78-30068 #

ARC-R/M-3798 ..... p0143 N78-14158 #
ARC-R/M-3800 ..... p0545 N78-30064 #
ARC-R/M-3801 ..... p0141 N78-14042 #
ARC-R/M-3804 ..... p0359 N78-23067 #
ARC-R/M-3805 ..... p0359 N78-23068 #
ARC-R/M-3806 ..... p0363 N78-23104 #
ARC-R/M-3808 ..... p0553 N78-30143 #

ARC-R/M-3809 ..... p0548 N78-30098 #
ARC-R/M-3811 ..... p0545 N78-30065 #
ARC-R/M-3812 ..... p0361 N78-23086 #

ARC-34400 ..... p0359 N78-23068 #
ARC-36252 ..... p0545 N78-30064 #
ARC-36355 ..... p0553 N78-30143 #
ARC-36716 ..... p0363 N78-23104 #
ARC-36724 ..... p0143 N78-14158 #
ARC-36787 ..... p0100 N78-13084 #
ARC-36825 ..... p0141 N78-14042 #
ARC-36914 ..... p0359 N78-23067 #
ARC-37053 ..... p0548 N78-30098 #
ARC-37080 ..... p0361 N78-23086 #
ARC-37156 ..... p0093 N78-13024 #
ARC-37198 ..... p0545 N78-30065 #
ARC-37204 ..... p0545 N78-30068 #
ARC-37207 ..... p0545 N78-30066 #

ARL/AERO-NOTE-364 ..... p0196 N78-16040 #
ARL/AERO-REPT-148 ..... p0437 N78-26095 #
ARL/MAT-REPT-104 ..... p0553 N78-30271 #
ARL/ME-NOTE-357 ..... p0313 N78-21054 #
ARL/ME-363 ..... p0399 N78-24146 #
ARL/MECH-ENG-REPT-149 ..... p0562 N78-31104 #
ARL/STRUC-REPT-363 ..... p0553 N78-30271 #

ARLCB-TR-77038 ..... p0397 N78-24125 #

ARO-ETF-TR-77-39 ..... p0042 N78-11110 #
ARO-ETF-TR-77-42 ..... p0210 N78-17068 #
ARO-ETF-TR-77-47 ..... p0029 N78-10107 #

ARO-PWT-TR-77-36 ..... p0100 N78-13080 #
ARO-PWT-TR-77-69 ..... p0345 N78-22032 #

ARO-VKF-TR-77-35 ..... p0020 N78-10033 #

ARO-1357.2-E ..... p0548 N78-30092 #
ARO-10157.7-E ..... p0255 N78-19073 #
ARO-10655.1-E ..... p0148 N78-15008 #
ARO-11695.2-E ..... p0394 N78-24096 #
ARO-11945.2-E ..... p0548 N78-30092 #
ARO-14802.1-A-E ..... p0394 N78-24094 #

ASC-F-116 ..... p0405 N78-25051 #

ASD-TR-76-7 ..... p0083 N78-12055 #
ASD-TR-76-19 ..... p0023 N78-10056 #
ASD-TR-76-20 ..... p0084 N78-12070 #
ASD-TR-76-30 ..... p0561 N78-31095 #
ASD-TR-76-33 ..... p0085 N78-12071 #
ASD-TR-77-8 ..... p0143 N78-14056 #
ASD-TR-77-33 ..... p0095 N78-13036 #
ASD-TR-77-76 ..... p0314 N78-21066 #
ASD-TR-78-5 ..... p0443 N78-26449 #
ASD-TR-78-17 ..... p0626 N78-33092 #

ASI-TR-76-28 ..... p0092 N78-13007*#
ASI-TR-76-38-VOL-1 ..... p0607 N78-32070 #
ASI-TR-76-38-VOL-2 ..... p0607 N78-32071 #

ASLE PREPRINT 77-LC-5C-1 ..... p0232 A78-28436
ASLE PREPRINT 77-LC-6B-2 ..... p0232 A78-28439*
ASLE PREPRINT 78-AM-3D-2 ..... p0378 A78-38095
ASLE PREPRINT 78-AM-4A-2 ..... p0378 A78-38083

ASME PAPER 77-DET-21 ..... p0134 A78-20592 #
ASME PAPER 77-DET-23 ..... p0226 A78-26796 #
ASME PAPER 77-DET-26 ..... p0134 A78-20595 #
ASME PAPER 77-DET-33 ..... p0135 A78-20598 #
ASME PAPER 77-DET-72 ..... p0469 A78-44146 #
ASME PAPER 77-DET-73 ..... p0338 A78-35231 #
ASME PAPER 77-DET-103 ..... p0135 A78-20607 #
ASME PAPER 77-HT-10 ..... p0106 A78-17483 #
ASME PAPER 77-WA/DE-25 ..... p0330 A78-33142 #
ASME PAPER 77-WA/GT-2 ..... p0330 A78-33168 #
ASME PAPER 77-WA/HT-27 ..... p0330 A78-33179 #
ASME PAPER 77-WA/MAT-1 ..... p0177 A78-23373 #
ASME PAPER 77-WA/MAT-7 ..... p0177 A78-23372 #

ASO-TEE-2-77 ..... p0250 N78-18441 #

ASRL-TR-186-2 ..... p0562 N78-31097 #

ATC-B-94300/6CR-26 ..... p0029 N78-10104 #

ATC-71 ..... p0206 N78-17035 #
ATC-75 ..... p0139 N78-14022 #

ATC-77 ..... p0144 N78-14212 #
ATC-78 ..... p0257 N78-19090 #
ATC-81 ..... p0239 N78-18027 #
ATC-85 ..... p0559 N78-31074 #

ATN-7802 ..... p0445 N78-26561 #

ATR-78(7640)-1 ..... p0251 N78-18797*#

AV-FR-668 ..... p0019 N78-10024 #

AVRADCOM-TR-78-15(AM) ..... p0498 N78-29068*#
AVRADCOM-TR-78-17(AM) ..... p0496 N78-29044*#
AVRADCOM-TR-78-22(PL) ..... p0455 N78-27130*#
AVRADCOM-TR-78-23(PL) ..... p0440 N78-26143*#
AVRADCOM-TR-78-24 ..... p0488 N78-28056*#
AVRADCOM-TR-78-26(PL) ..... p0441 N78-26145*#
AVRADCOM-TR-78-31(PL) ..... p0454 N78-27126*#
AVRADCOM-TR-78-32(AM) ..... p0497 N78-29067*#
AVRADCOM-TR-78-33(AM) ..... p0438 N78-26106*#
AVRADCOM-TR-78-34 ..... p0557 N78-31044*#
AVRADCOM-TR-78-39(PL) ..... p0503 N78-29215*#

AVSD-0393-77-CR ..... p0302 N78-20086 #

AWAVS-7 ..... p0152 N78-15061 #

BAC-7467-927024 ..... p0492 N78-28277 #
BAC-7467-928009 ..... p0492 N78-28276 #
BAC-7467-928010 ..... p0492 N78-28275 #

BBN-3425 ..... p0199 N78-16059 #
BBN-3679 ..... p0446 N78-26881*#

BDX-613-1836-REV ..... p0567 N78-31249 #

BHT-699-099-059 ..... p0307 N78-20123 #

BLL-CE-TRANS-7083-(9022.09) ..... p0497 N78-29066 #

BMFT-FB-W-77-14 ..... p0307 N78-20127 #
BMFT-FB-W-77-20 ..... p0349 N78-22083 #
BMFT-FB-W-77-22 ..... p0353 N78-22114 #
BMFT-FB-W-77-23 ..... p0353 N78-22108 #
BMFT-FB-W-77-26 ..... p0350 N78-22084 #
BMFT-FB-W-77-27 ..... p0350 N78-22085 #
BMFT-FB-W-77-28 ..... p0350 N78-22086 #
BMFT-FB-W-77-29 ..... p0350 N78-22087 #
BMFT-FB-W-77-30 ..... p0350 N78-22088 #
BMFT-FB-W-77-31 ..... p0350 N78-22089 #
BMFT-FB-W-77-36 ..... p0350 N78-22090 #
BMFT-FB-W-77-37 ..... p0351 N78-22091 #

BMVG-FBWT-77-6 ..... p0243 N78-18057 #
BMVG-FBWT-77-7 ..... p0237 N78-18010 #
BMVG-FBWT-77-15 ..... p0238 N78-18013 #
BMVG-FBWT-77-16 ..... p0245 N78-18072 #
BMVG-FBWT-77-23 ..... p0555 N78-30603 #

BNL-23633 ..... p0460 N78-27711 #

BNWL-2030 ..... p0138 N78-14019 #

BRL-352 ..... p0307 N78-20122 #

BR58309 ..... p0152 N78-15057 #
BR58350 ..... p0150 N78-15035 #
BR58372 ..... p0046 N78-11802 #
BR58376 ..... p0145 N78-14408 #
BR58403 ..... p0148 N78-15017 #
BR58707 ..... p0154 N78-15525 #
BR58839 ..... p0145 N78-14409 #
BR59303 ..... p0140 N78-14032 #
BR59443 ..... p0139 N78-14020 #
BR59543 ..... p0548 N78-30097 #
BR60629 ..... p0257 N78-19095 #
BR61071 ..... p0210 N78-17071 #
BR61584 ..... p0545 N78-30064 #
BR61586 ..... p0553 N78-30143 #
BR61587 ..... p0545 N78-30065 #
BR61905 ..... p0349 N78-22077 #
BR62233 ..... p0356 N78-22388 #
BR62769 ..... p0439 N78-26134 #
BR63467 ..... p0504 N78-29452 #
BR64083 ..... p0560 N78-31087 #

BSR-4230 ..... p0325 N78-21402 #

BU-208 ..... p0141 N78-14043 #

CALSPAN-AB-5487-A-3 ..... p0504 N78-29412 #

CALSPAN-XE-5933-A-101 ..... p0201 N78-15072 #
CALSPAN-XE-5933-A-102 ..... p0245 N78-18071 #

CED-77-42 ..... p0032 N78-10624 #
CED-77-98 ..... p0091 N78-12552 #

CEEDO-TR-76-23 ..... p0102 N78-13640 #
CEEDO-TR-77-40 ..... p0310 N78-20148*#
CEEDO-TR-77-41 ..... p0400 N78-24159 #
CEEDO-TR-77-42 ..... p0610 N78-32090 #
CEEDO-TR-77-44-VOL-1 ..... p0310 N78-20147 #
CEEDO-TR-77-44-VOL-2 ..... p0324 N78-21170 #
CEEDO-TR-77-57 ..... p0455 N78-27131 #
CEEDO-TR-78-2 ..... p0364 N78-23107 #
CEEDO-TR-78-09 ..... p0460 N78-27628 #
CEEDO-TR-78-20 ..... p0455 N78-27132 #

CEL-TN-1487 ..... p0043 N78-11124 #

CEL-TR-865 ..... p0503 N78-29113 #

CERF-AP-24 ..... p0099 N78-13078 #

CERL-TR-C-76-VOL-1 ..... p0310 N78-20147 #
CERL-TR-C-76-VOL-2 ..... p0324 N78-21170 #

CERL-TR-N-38 ..... p0367 N78-23879 #

CN-ISSN-0082-5255 ..... p0246 N78-18077 #
CN-ISSN-0082-5255 ..... p0353 N78-22112 #
CN-ISSN-0082-5263 ..... p0081 N78-12030 #
CN-ISSN-0082-5263 ..... p0345 N78-22029 #
CN-ISSN-0082-5263 ..... p0403 N78-24755 #
CN-ISSN-0082-5263 ..... p0454 N78-27123 #

CN-8 ..... p0504 N78-29705 #

COM-74-10868 ..... p0412 N78-25840 #

CONF-770151-7 ..... p0495 N78-28894 #
CONF-771053-8 ..... p0553 N78-30182 #
CONF-780412-3 ..... p0460 N78-27711 #
CONF-780419-2 ..... p0457 N78-27145 #
CONF-780506-8 ..... p0608 N78-32078 #
CONF-780524-1 ..... p0630 N78-33121 #

CONS/1011-12 ..... p0198 N78-16053*#

CRANFIELD-AERO-33 ..... p0147 N78-15003 #
CRANFIELD-AERO-34 ..... p0147 N78-15004 #

CRINC-FRL-266-1 ..... p0235 N78-17993*#
CRINC-FRL-281-2 ..... p0204 N78-17002*#
CRINC-FRL-281-3 ..... p0499 N78-29086*#

CRREL-77-28 ..... p0493 N78-28279 #
CRREL-78-8 ..... p0615 N78-32327 #

CSIR-ME-1521 ..... p0409 N78-25095 #

CUED/A-TURBO/TR-88 ..... p0361 N78-23090 #
CUED/A-TURBO/TR-90 ..... p0361 N78-23091 #
CUED/A-TURBO/TR-91 ..... p0362 N78-23092 #

C76-1391/034C ..... p0096 N78-13046 #
C6352-17 ..... p0628 N78-33106 #

D-180-22888-1 ..... p0209 N78-17062*#
D-210-11188-2 ..... p0203 N78-16998*#

DDA-EDR-9127 ..... p0042 N78-11108 #
DDA-EDR-9379 ..... p0352 N78-22106 #

DDC/BIB-77/077 ..... p0145 N78-14691 #

DGLR PAPER 77-005 ..... p0188 A78-24402 #
DGLR PAPER 77-007 ..... p0188 A78-24404 #
DGLR PAPER 77-017 ..... p0189 A78-24410
DGLR PAPER 77-018 ..... p0189 A78-24411 #
DGLR PAPER 77-019 ..... p0189 A78-24412 #
DGLR PAPER 77-021 ..... p0189 A78-24414 #
DGLR PAPER 77-026 ..... p0189 A78-24417
DGLR PAPER 77-027 ..... p0189 A78-24418 #
DGLR PAPER 77-028 ..... p0189 A78-24419
DGLR PAPER 77-029 ..... p0189 A78-24420 #
DGLR PAPER 77-030 ..... p0189 A78-24421 #
DGLR PAPER 77-031 ..... p0190 A78-24422 #
DGLR PAPER 77-033 ..... p0191 A78-24448 #
DGLR PAPER 77-035 ..... p0190 A78-24425 #
DGLR PAPER 77-036 ..... p0190 A78-24426
DGLR PAPER 77-037 ..... p0190 A78-24427 #
DGLR PAPER 77-044 ..... p0190 A78-24433 #
DGLR PAPER 77-045 ..... p0190 A78-24434 #
DGLR PAPER 77-046 ..... p0190 A78-24435 #
DGLR PAPER 77-047 ..... p0190 A78-24436 #
DGLR PAPER 77-048 ..... p0191 A78-24437 #
DGLR PAPER 77-049 ..... p0191 A78-24438 #
DGLR PAPER 77-050 ..... p0191 A78-24439
DGLR PAPER 77-052 ..... p0191 A78-24441 #
DGLR PAPER 77-055 ..... p0191 A78-24443 #
DGLR PAPER 77-061 ..... p0116 A78-18702 #
DGLR PAPER 77-062 ..... p0117 A78-18707 #
DGLR PAPER 77-063 ..... p0116 A78-18704 #
DGLR PAPER 77-064 ..... p0116 A78-18706 #
DGLR PAPER 77-070 ..... p0116 A78-18705 #
DGLR PAPER 77-072 ..... p0116 A78-18703 #
DGLR PAPER 77-079 ..... p0290 A78-31949 #
DGLR PAPER 77-080 ..... p0290 A78-31948 #
DGLR PAPER 77-082 ..... p0289 A78-31944 #
DGLR PAPER 77-083 ..... p0289 A78-31942 #
DGLR PAPER 77-086 ..... p0290 A78-31950 #
DGLR PAPER 77-087 ..... p0290 A78-31945 #
DGLR PAPER 78-065 ..... p0477 A78-45227
DGLR PAPER 78-067 ..... p0477 A78-45226 #
DGLR PAPER 78-071 ..... p0478 A78-45238 #
DGLR PAPER 78-075 ..... p0478 A78-45240 #

DGT-11-393/A ..... p0355 N78-22240 #
DGT-12-675 ..... p0355 N78-22383 #

DLR-DB-552-76/12 ..... p0042 N78-11114*#

DLR-FB-75-71 ..... p0139 N78-14020 #
DLR-FB-77-12 ..... p0034 N78-11017 #
DLR-FB-77-12 ..... p0238 N78-18018 #
DLR-FB-77-15 ..... p0138 N78-14015 #
DLR-FB-77-15 ..... p0205 N78-17029 #
DLR-FB-77-21 ..... p0238 N78-18014 #
DLR-FB-77-21 ..... p0488 N78-28064 #
DLR-FB-77-24 ..... p0145 N78-14379 #
DLR-FB-77-24 ..... p0250 N78-18408 #
DLR-FB-77-26 ..... p0141 N78-14044 #
DLR-FB-77-26 ..... p0246 N78-18081 #
DLR-FB-77-32 ..... p0245 N78-18073 #
DLR-FB-77-34 ..... p0204 N78-17004 #
DLR-FB-77-43 ..... p0566 N78-31135 #
DLR-FB-77-54 ..... p0564 N78-31117 #
DLR-FB-77-55 ..... p0565 N78-31125 #
DLR-FB-77-63 ..... p0567 N78-31251 #

DLR-IB-75/8 ..... p0145 N78-14763 #
DLR-IB-151-76/6 ..... p0044 N78-11130 #
DLR-IB-151-76/12 ..... p0488 N78-28062 #
DLR-IB-151-76/15 ..... p0043 N78-11118 #
DLR-IB-151-76/18 ..... p0034 N78-11016 #
DLR-IB-151-77/9 ..... p0138 N78-14008 #
DLR-IB-151-77/11 ..... p0243 N78-18058 #
DLR-IB-151-77/13 ..... p0498 N78-29072 #
DLR-IB-152-75/25 ..... p0044 N78-11204 #
DLR-IB-152-77/07 ..... p0038 N78-11056 #
DLR-IB-152-77/09 ..... p0038 N78-11057 #
DLR-IB-152-77/11 ..... p0038 N78-11058 #
DLR-IB-257-77/11 ..... p0251 N78-18878 #
DLR-IB-456-77/8 ..... p0365 N78-23258 #
DLR-IB-536-76/3 ..... p0137 N78-14002 #
DLR-IB-536-76/3 ..... p0238 N78-18012 #
DLR-IB-536-76/4 ..... p0137 N78-14003 #
DLR-IB-536-76/4 ..... p0238 N78-18011 #
DLR-IB-536-77/1 ..... p0238 N78-18012 #
DLR-IB-552-77/15 ..... p0143 N78-14059 #
DLR-IB-552-77/20 ..... p0243 N78-18059 #
DLR-IB-553-75/9 ..... p0146 N78-14895 #

DNA-4279T ..... p0248 N78-18272 #
DNA-4400F-1 ..... p0490 N78-28085 #
DNA-4446F ..... p0494 N78-28484 #
DNA-4507F ..... p0630 N78-33128 #

DOC-R77AEG400-VOL-1 ..... p0501 N78-29099*#
DOC-R77AEG524 ..... p0487 N78-28043*#
DOC-R78AEG408 ..... p0611 N78-32097*#

DOE/NASA/1028-78/18 ..... p0445 N78-26552*#

DOT-TSC-FAA-77-8 ..... p0019 N78-10024 #

DOT-TSC-FAA-77-19 ..... p0239 N78-18026 #
DOT-TSC-FAA-78-2 ..... p0489 N78-28076 #

DOT-TSC-OST-77-35 ..... p0395 N78-24099 #
DOT-TSC-OST-78-1 ..... p0395 N78-24099 #

DRDMI-E-78-11 ..... p0613 N78-32169 #

DRDMI-TD-77-16 ..... p0084 N78-12067 #

DREO-TN-77-3 ..... p0311 N78-20635 #
DREO-TN-77-5 ..... p0311 N78-20636 #
DREO-TN-77-7 ..... p0310 N78-20631 #
DREO-TN-77-8 ..... p0311 N78-20632 #

DTNSRDC-ASED-383 ..... p0622 N78-33049 #

DTNSRDC-77-0065 ..... p0236 N78-18001 #
DTNSRDC-77-0066 ..... p0148 N78-15010 #
DTNSRDC-77-0073 ..... p0085 N78-12074 #
DTNSRDC-77-0076 ..... p0090 N78-12251 #
DTNSRDC-77-0084 ..... p0033 N78-11012 #
DTNSRDC-77-0104 ..... p0194 N78-16023 #
DTNSRDC-77-0117 ..... p0256 N78-19085 #

DTNSRDC/ASED-373 ..... p0558 N78-31047 #
DTNSRDC/ASED-384 ..... p0096 N78-13048 #
DTNSRDC/ASED-385 ..... p0093 N78-13021 #
DTNSRDC/ASED-389 ..... p0313 N78-21060 #
DTNSRDC/ASED-390 ..... p0236 N78-18002 #
DTNSRDC/ASED-393 ..... p0352 N78-22103 #
DTNSRDC/ASED-395 ..... p0359 N78-23064 #
DTNSRDC/ASED-396 ..... p0302 N78-20087 #
DTNSRDC/ASED-397 ..... p0610 N78-32092 #

DYTEC-R-7705 ..... p0403 N78-24899 #
DYTEC-R-7708 ..... p0251 N78-18874*#

D6-42438-3 ..... p0197 N78-16043*#
D6-42438-4 ..... p0305 N78-20112*#
D6-42438-5 ..... p0306 N78-20116*#
D6-42877-PEV ..... p0303 N78-20094*#
D6-42968-PT-2 ..... p0304 N78-20102*#
D6-44052-VOL-1 ..... p0139 N78-14026 #
D6-44200-VOL-2 ..... p0043 N78-11116 #
D6-44283 ..... p0404 N78-24900*#
D6-44419 ..... p0203 N78-16999*#
D6-44664 ..... p0454 N78-27124*#
D6-45090 ..... p0140 N78-14035 #
D6-45099 ..... p0301 N78-20077*#
D6-45100 ..... p0301 N78-20076*#
D6-45148 ..... p0394 N78-24098 #
D6-46317 ..... p0626 N78-33088 #
D6-46320 ..... p0348 N78-22074*#
D6-46346 ..... p0143 N78-14055*#
D6-46373 ..... p0450 N78-27087*#
D6-60181-5 ..... p0194 N78-16015*#
D180-20526-1 ..... p0045 N78-11236 #
D180-20795-1 ..... p0453 N78-27115 #
D210-11025-1 ..... p0317 N78-21098 #
D210-11094-2 ..... p0096 N78-13045 #
D210-11135-1 ..... p0019 N78-10020*#
D210-11135-2 ..... p0019 N78-10021*#
D210-11135-3-APP ..... p0019 N78-10022*#
D210-11142-1 ..... p0366 N78-23438 #
D210-11169-1 ..... p0256 N78-19084 #
D210-11188-1-VOL-1 ..... p0194 N78-16003*#
D210-11225-1 ..... p0242 N78-18054 #
D210-11226-1 ..... p0306 N78-20121 #
D210-11231-1 ..... p0095 N78-13038*#
D210-11231-2 ..... p0095 N78-13039*#
D210-11232-1 ..... p0397 N78-24126 #
D210-11236-1 ..... p0560 N78-31089 #
D210-11236-2-VOL-2 ..... p0548 N78-30095 #
D210-11255-1 ..... p0022 N78-10046*#
D210-11278-1 ..... p0499 N78-29083*#
D210-11328-1 ..... p0564 N78-31114 #
D301-10280-1 ..... p0349 N78-22081 #
D301-10322-1 ..... p0353 N78-22113 #
D748-10113-3 ..... p0404 N78-24900*#

E-8305 ..... p0025 N78-10068*#
E-8852 ..... p0098 N78-13063*#
E-8916-2 ..... p0501 N78-29100*#
E-8964 ..... p0198 N78-16053*#
E-8994 ..... p0628 N78-33107*#
E-9005 ..... p0628 N78-33109*#
E-9091 ..... p0098 N78-13064*#
E-9154 ..... p0020 N78-10026*#
E-9155 ..... p0028 N78-10097*#
E-9174 ..... p0301 N78-20080*#
E-9187 ..... p0308 N78-20130*#
E-9207 ..... p0041 N78-11106*#
E-9213 ..... p0033 N78-11008*#
E-9246 ..... p0545 N78-30057*#
E-9253 ..... p0308 N78-20132*#
E-9257 ..... p0318 N78-21112*#
E-9258 ..... p0028 N78-10098*#
E-9262 ..... p0038 N78-11063*#
E-9283 ..... p0236 N78-17998*#
E-9293 ..... p0146 N78-14998*#
E-9298-1 ..... p0101 N78-13439*#
E-9302 ..... p0628 N78-33108*#
E-9323 ..... p0212 N78-17558*#
E-9331 ..... p0194 N78-16001*#
E-9336 ..... p0097 N78-13056*#
E-9342 ..... p0308 N78-20133*#
E-9350 ..... p0325 N78-21473*#
E-9355 ..... p0362 N78-23095*#
E-9387 ..... p0318 N78-21114*#
E-9392 ..... p0102 N78-13853*#
E-9395 ..... p0352 N78-22101*#
E-9405 ..... p0102 N78-13854*#
E-9412 ..... p0155 N78-15852*#
E-9416 ..... p0101 N78-13233*#
E-9418 ..... p0442 N78-26446*#
E-9425 ..... p0098 N78-13061*#
E-9436 ..... p0151 N78-15043*#
E-9449 ..... p0213 N78-17921*
E-9449-2 ..... p0496 N78-28986*#
E-9453 ..... p0352 N78-22099*#
E-9457 ..... p0266 N78-19325*#
E-9458 ..... p0455 N78-27130*#
E-9460 ..... p0556 N78-30896*#
E-9464 ..... p0628 N78-33110*#
E-9475 ..... p0208 N78-17059*#
E-9505 ..... p0318 N78-21109*#
E-9517-1 ..... p0441 N78-26145*#
E-9519 ..... p0206 N78-17041*#
E-9596 ..... p0401 N78-24370*#
E-9597 ..... p0401 N78-24369*#
E-9601 ..... p0351 N78-22098*#
E-9605 ..... p0398 N78-24137*#
E-9607 ..... p0398 N78-24138*#
E-9612 ..... p0403 N78-24897*#
E-9626 ..... p0361 N78-23088*#
E-9635 ..... p0437 N78-26099*#
E-9652 ..... p0445 N78-26552*#
E-9653 ..... p0634 N78-33618*#
E-9655 ..... p0456 N78-27143*#
E-9658 ..... p0437 N78-26100*#
E-9668 ..... p0441 N78-26144*#
E-9696 ..... p0454 N78-27126*#
E-9703 ..... p0456 N78-27142*#
E-9706 ..... p0454 N78-27125*#
E-9710 ..... p0456 N78-27137*#
E-9719 ..... p0454 N78-27127*#
E-9726 ..... p0503 N78-29215*#
E-9760 ..... p0558 N78-31061*#
E-9768 ..... p0632 N78-33283*#
E-9793 ..... p0627 N78-33102*#
E-23027 ..... p0254 N78-19067 #

ECAC-PR-75-062 ..... p0139 N78-14025 #
ECAC-PR-75-071-VOL-2 ..... p0090 N78-12281 #
ECAC-PR-76-004 ..... p0304 N78-20101 #
ECAC-PR-76-017 ..... p0348 N78-22069 #
ECAC-PR-76-030 ..... p0360 N78-23074 #
ECAC-PR-76-078 ..... p0493 N78-28297 #
ECAC-PR-77-012 ..... p0205 N78-17034 #
ECAC-PR-77-037 ..... p0303 N78-20099 #
ECAC-PR-77-067 ..... p0493 N78-28295 #

ECOM-4503 ..... p0022 N78-10043 #

EDR-9339 ..... p0459 N78-27427*#
EDR-9477 ..... p0458 N78-27369 #

EER-5-21 ..... p0024 N78-10063 #

EPA-460/3-76-036 ..... p0363 N78-23099 #

EPFL-ITA-2 ..... p0408 N78-25091

ERIM-122400-9-F ..... p0244 N78-18064 #

ER74-4435 ..... p0317 N78-21099 #

ESA-TT-413 ..... p0093 N78-13025 #
ESA-TT-426 ..... p0238 N78-18018 #
ESA-TT-430 ..... p0205 N78-17029 #
ESA-TT-433 ..... p0250 N78-18408 #
ESA-TT-434 ..... p0246 N78-18081 #
ESA-TT-435 ..... p0365 N78-23310 #
ESA-TT-436 ..... p0365 N78-23311 #
ESA-TT-462 ..... p0365 N78-23258 #
ESA-TT-463 ..... p0488 N78-28064 #
ESA-TT-477 ..... p0556 N78-30909 #

ESC-0239-1FR ..... p0083 N78-12052 #
ESC-0289-1FR ..... p0083 N78-12053 #

ESDU-77012 ..... p0079 N78-12010
ESDU-77015 ..... p0084 N78-12066
ESDU-77030 ..... p0366 N78-23469

ESL-78-2902 ..... p0153 N78-15324*#
ESL-784685-4 ..... p0632 N78-33311 #

EXXON/GRU.1KWC.77 ..... p0411 N78-25240 #
EXXON/GRU.3PEA.77-VOL-3 ..... p0410 N78-25239 #

FAA-AM-77-11 ..... p0020 N78-10036 #
FAA-AM-77-20 ..... p0083 N78-12050 #

FAA-ASP-76-2 ..... p0354 N78-22117 #
FAA-ASP-76-7 ..... p0201 N78-16074 #
FAA-ASP-77-3 ..... p0201 N78-16075 #

FAA-AVP-77-17 ..... p0195 N78-16027 #
FAA-AVP-77-34 ..... p0559 N78-31075 #

FAA-ED-03-1 ..... p0625 N78-33073 #
FAA-ED-18-3 ..... p0630 N78-33119 #
FAA-ED-21-1A ..... p0546 N78-30071 #

FAA-EM-77-2 ..... p0195 N78-16028 #
FAA-EM-77-5 ..... p0037 N78-11046 #
FAA-EM-77-8 ..... p0196 N78-16035 #
FAA-EM-77-9 ..... p0139 N78-14023 #
FAA-EM-77-10 ..... p0239 N78-18026 #
FAA-EM-77-14 ..... p0256 N78-19081 #
FAA-EM-77-15 ..... p0354 N78-22116 #
FAA-EM-77-16 ..... p0489 N78-28076 #
FAA-EM-77-17 ..... p0211 N78-17077 #
FAA-EM-77-18-PT-2 ..... p0304 N78-20102*#
FAA-EM-78-2 ..... p0402 N78-24385 #
FAA-EM-78-4 ..... p0489 N78-28077 #
FAA-EM-78-5-VOL-1 ..... p0625 N78-33072 #
FAA-EM-78-8 ..... p0566 N78-31130 #
FAA-EM-78-8A ..... p0624 N78-33068 #
FAA-EM-78-9 ..... p0566 N78-31131 #
FAA-EM-78-11 ..... p0624 N78-33062 #

FAA-EQ-77-8 ..... p0199 N78-16059 #

FAA-MS-77-2 ..... p0198 N78-16050 #

FAA-NA-75-61 ..... p0032 N78-10343 #
FAA-NA-76-30 ..... p0037 N78-11045 #
FAA-NA-77-1 ..... p0021 N78-10041 #
FAA-NA-77-4 ..... p0257 N78-19088 #
FAA-NA-77-10 ..... p0195 N78-16029 #
FAA-NA-77-11 ..... p0139 N78-14028 #
FAA-NA-77-12 ..... p0195 N78-16030 #
FAA-NA-77-18 ..... p0634 N78-33655 #
FAA-NA-77-22 ..... p0547 N78-30088 #
FAA-NA-77-27 ..... p0452 N78-27104 #
FAA-NA-77-28 ..... p0257 N78-19089 #
FAA-NA-77-32 ..... p0037 N79-11046 #
FAA-NA-77-33 ..... p0400 N78-24154 #
FAA-NA-77-35 ..... p0045 N78-11251 #
FAA-NA-77-37 ..... p0458 N78-27313 #
FAA-NA-77-38 ..... p0453 N78-27112 #
FAA-NA-77-39 ..... p0567 N78-31325 #
FAA-NA-77-41 ..... p0239 N78-18021 #
FAA-NA-77-42 ..... p0491 N78-28092 #
FAA-NA-77-47 ..... p0400 N78-24153 #
FAA-NA-77-48 ..... p0490 N78-28081 #
FAA-NA-77-49 ..... p0489 N78-28075 #
FAA-NA-78-1 ..... p0452 N78-27103 #
FAA-NA-78-2 ..... p0632 N78-33290 #
FAA-NA-78-5 ..... p0624 N78-33063 #
FAA-NA-78-12 ..... p0625 N78-33069 #
FAA-NA-78-13 ..... p0488 N78-28070 #
FAA-NA-78-14 ..... p0489 N78-28071 #
FAA-NA-78-15 ..... p0489 N78-28072 #
FAA-NA-78-16 ..... p0559 N78-31070 #
FAA-NA-78-17 ..... p0559 N78-31071 #
FAA-NA-78-18 ..... p0546 N78-30075 #
FAA-NA-78-19 ..... p0559 N78-31072 #
FAA-NA-78-21 ..... p0489 N78-28073 #
FAA-NA-78-22 ..... p0489 N78-28074 #
FAA-NA-78-23 ..... p0625 N78-33071 #
FAA-NA-78-30 ..... p0566 N78-31132 #

FAA-RD-28-27 ..... p0489 N78-28075 #
FAA-RD-74-37 ..... p0354 N78-22118 #
FAA-RD-75-110-2 ..... p0099 N78-13078 #
FAA-RD-75-173-VOL-1 ..... p0139 N78-14026 #
FAA-RD-75-201 ..... p0024 N78-10063 #
FAA-RD-76-33 ..... p0021 N78-10040 #
FAA-RD-76-64 ..... p0030 N78-10118 #
FAA-RD-76-79-1 ..... p0028 N78-10100 #
FAA-RD-76-79-1-A-SUPPL-1 ..... p0031 N78-10119 #
FAA-RD-76-102 ..... p0139 N78-14025 #
FAA-RD-76-154 ..... p0031 N78-10342 #
FAA-RD-76-206 ..... p0200 N78-16068 #
FAA-RD-76-222-VOL-1 ..... p0021 N78-10037 #
FAA-RD-76-222-2 ..... p0043 N78-11116 #
FAA-RD-77-4 ..... p0245 N78-18069 #
FAA-RD-77-6 ..... p0099 N78-13079 #
FAA-RD-77-9 ..... p0196 N78-16038 #
FAA-RD-77-12,4 ..... p0625 N78-33070 #
FAA-RD-77-13 ..... p0045 N78-11251 #
FAA-RD-77-16 ..... p0196 N78-16037 #
FAA-RD-77-23 ..... p0195 N78-16025 #
FAA-RD-77-36 ..... p0034 N78-11022*#
FAA-RD-77-37 ..... p0144 N78-14183 #
FAA-RD-77-42 ..... p0043 N78-11120 #
FAA-RD-77-43 ..... p0021 N78-10041 #
FAA-RD-77-44 ..... p0142 N78-14049 #
FAA-RD-77-46 ..... p0019 N78-10024 #
FAA-RD-77-47 ..... p0247 N78-18158 #
FAA-RD-77-55 ..... p0041 N78-11105 #
FAA-RD-77-56-2 ..... p0090 N78-12281 #
FAA-RD-77-60 ..... p0458 N78-27314 #
FAA-RD-77-69 ..... p0037 N78-11045 #
FAA-RD-77-71 ..... p0043 N78-11122 #
FAA-RD-77-75 ..... p0348 N78-22069 #
FAA-RD-77-76 ..... p0087 N78-12087 #
FAA-RD-77-77 ..... p0139 N78-14022 #
FAA-RD-77-87 ..... p0144 N78-14212 #
FAA-RD-77-89 ..... p0360 N78-23074 #
FAA-RD-77-92 ..... p0257 N78-19090 #
FAA-RD-77-96 ..... p0205 N78-17034 #
FAA-RD-77-98 ..... p0139 N78-14028 #
FAA-RD-77-99 ..... p0324 N78-21234 #
FAA-RD-77-100 ..... p0087 N78-12088 #
FAA-RD-77-101 ..... p0031 N78-10120 #
FAA-RD-77-102 ..... p0036 N78-11044 #
FAA-RD-77-105 ..... p0140 N78-14033 #
FAA-RD-77-107 ..... p0139 N78-14029 #
FAA-RD-77-110 ..... p0304 N79-20101 #
FAA-RD-77-113 ..... p0395 N78-24105 #
FAA-RD-77-128 ..... p0257 N78-19088 #
FAA-RD-77-134 ..... p0239 N78-18027 #
FAA-RD-77-135 ..... p0257 N78-19089 #
FAA-RD-77-140 ..... p0303 N78-20099 #
FAA-RD-77-143 ..... p0206 N78-17035 #
FAA-RD-77-147 ..... p0317 N78-21097 #
FAA-RD-77-150 ..... p0559 N78-31074 #
FAA-RD-77-151 ..... p0196 N78-16032 #
FAA-RD-77-153 ..... p0248 N78-18264 #
FAA-RD-77-157 ..... p0200 N78-16067 #
FAA-RD-77-159 ..... p0206 N78-17036 #
FAA-RD-77-163 ..... p0196 N78-16031 #
FAA-RD-77-165 ..... p0628 N78-33106 #
FAA-RD-77-166 ..... p0211 N78-17078 #
FAA-RD-77-167 ..... p0403 N78-24899 #
FAA-RD-77-169 ..... p0239 N78-18021 #
FAA-RD-77-176 ..... p0400 N78-24153 #
FAA-RD-77-182 ..... p0452 N78-27104 #
FAA-RD-77-183 ..... p0493 N78-28297 #
FAA-RD-77-185 ..... p0439 N78-26123 #
FAA-RD-77-187 ..... p0458 N78-27313 #
FAA-RD-77-188 ..... p0490 N78-28082 #
FAA-RD-77-189-1-VOL-1 ..... p0560 N78-31088 #
FAA-RD-77-189-2-VOL-2 ..... p0499 N78-29084 #
FAA-RD-77-189-3-VOL-3 ..... p0499 N78-29085 #
FAA-RD-77-190 ..... p0400 N78-24154 #
FAA-RD-77-191 ..... p0452 N78-27103 #
FAA-RD-78-3 ..... p0451 N78-27093*#
FAA-RD-78-4 ..... p0400 N78-24155 #
FAA-RD-78-7 ..... p0504 N78-29699*#

FAA-RD-78-8 ..... p0493 N78-28295 #
FAA-RD-78-10 ..... p0628 N78-33105 #
FAA-RD-78-12 ..... p0457 N78-27144 #
FAA-RD-78-13 ..... p0488 N78-28070 #
FAA-RD-78-14 ..... p0489 N78-28071 #
FAA-RD-78-15 ..... p0489 N78-28072 #
FAA-RD-78-16 ..... p0559 N78-31070 #
FAA-RD-78-17 ..... p0559 N78-31071 #
FAA-RD-78-18 ..... p0546 N78-30075 #
FAA-RD-78-19 ..... p0559 N78-31072 #
FAA-RD-78-21 ..... p0489 N78-28073 #
FAA-RD-78-22 ..... p0489 N78-28074 #
FAA-RD-78-23 ..... p0625 N78-33071 #
FAA-RD-78-25 ..... p0458 N78-27311 #
FAA-RD-78-28 ..... p0490 N78-28081 #
FAA-RD-78-30-2-VOL-2 ..... p0625 N78-33075 #
FAA-RD-78-31 ..... p0491 N78-28092 #
FAA-RD-78-36 ..... p0634 N78-33615 #
FAA-RD-78-39 ..... p0634 N78-33655 #
FAA-RD-78-41 ..... p0559 N78-31073 #
FAA-RD-78-42 ..... p0452 N78-27101 #
FAA-RD-78-43 ..... p0493 N78-28296 #
FAA-RD-78-48 ..... p0632 N78-33290 #
FAA-RD-78-55 ..... p0624 N78-33063 #
FAA-RD-78-69 ..... p0566 N78-31132 #
FAA-RD-78-76 ..... p0625 N78-33069 #

FB-109 ..... p0356 N78-22388 #

FE-2664-3 ..... p0457 N78-27279 #
FE-2786-12 ..... p0632 N78-33243 #

FFA-AU-556 ..... p0438 N78-26112 #
FFA-AU-1431 ..... p0488 N78-28061 #

FFA-TN-AU-725 ..... p0313 N78-21062 #

FOK-R-2132 ..... p0442 N78-26220 #
FOK-R-2162 ..... p0442 N78-26221 #

FOK-S-144 ..... p0440 N78-26138 #

FOK-3-1823 ..... p0353 N78-22107 #

FP2-E-034-ADD ..... p0625 N78-33070 #

FR-78-14-287 ..... p0614 N78-32321 #
FR-2902-27 ..... p0153 N78-15324*#
FR-8100 ..... p0042 N78-11113 #
FR-8101 ..... p0088 N78-12092 #
FR-8187-VOL-1 ..... p0101 N78-13446 #
FR-8480 ..... p0442 N78-26202 #
FR-8984 ..... p0355 N78-22211 #
FR-9232 ..... p0245 N78-18070*#
FR-9560 ..... p0564 N78-31113 #
FR-9609 ..... p0208 N78-17058*#
FR-10200A ..... p0563 N78-31106*#

FRA/CRD-78/03 ..... p0557 N78-31007 #

FTD-ID(RS)I-0037-77 ..... p0082 N78-12042 #
FTD-ID(RS)I-0040-77 ..... p0144 N78-14347 #
FTD-ID(RS)I-0041-77 ..... p0091 N78-12379 #
FTD-ID(RS)I-0042-77 ..... p0145 N78-14348 #
FTD-ID(RS)I-0043-77 ..... p0091 N78-12387 #
FTD-ID(RS)I-0073-77 ..... p0088 N78-12096 #
FTD-ID(RS)I-0094-77 ..... p0140 N78-14038 #
FTD-ID(RS)I-0099-77 ..... p0082 N78-12044 #
FTD-ID(RS)I-0134-77 ..... p0147 N78-15006 #
FTD-ID(RS)I-0198-77 ..... p0144 N78-14173 #
FTD-ID(RS)I-0475-77 ..... p0151 N78-15048 #
FTD-ID(RS)I-0531-77 ..... p0093 N78-13020 #
FTD-ID(RS)I-0759-77 ..... p0101 N78-13452 #
FTD-ID(RS)I-1848-76 ..... p0153 N78-15294 #
FTD-ID(RS)I-1857-76 ..... p0145 N78-14411 #
FTD-ID(RS)T-0763-77 ..... p0099 N78-13072 #
FTD-ID(RS)T-0819-77 ..... p0143 N78-14150 #
FTD-ID(RS)T-1237-77 ..... p0236 N78-18003 #
FTD-ID(RS)T-1238-77 ..... p0237 N78-18004 #
FTD-ID(RS)T-1239-77 ..... p0255 N78-19074 #
FTD-ID(RS)T-1249-77 ..... p0319 N78-21117 #
FTD-ID(RS)T-1534-77-PT-2 ..... p0255 N78-19078 #
FTD-ID(RS)T-1543-77-PT-1 ..... p0255 N78-19077 #
FTD-ID(RS)T-1543-77-PT-3 ..... p0255 N78-19079 #
FTD-ID(RS)T-1567-77 ..... p0394 N78-24090 #
FTD-ID(RS)T-1783-77 ..... p0363 N78-23102 #
FTD-ID(RS)T-1784-77 ..... p0358 N78-23059
FTD-ID(RS)I-1818-77 ..... p0359 N78-23062 #
FTD-ID(RS)T-1986-77 ..... p0367 N78-23986 #

FTD-ID(RS)T-2232-77-PT-1 ..... p0395 N78-24107 #

FTR-9169 ..... p0042 N78-11112 #

GASL-TR-242 ..... p0088 N78-12093 #
GASL-TR-248 ..... p0492 N78-28098*#

GDCA-AHD72-005 ..... p0091 N78-13000 #
GDCA-AHD72-006 ..... p0091 N78-13001 #
GDCA-AHD72-008 ..... p0092 N78-13002 #

GPO-91-591 ..... p0326 N78-21891 #
GPO-98-931 ..... p0559 N78-31076 #

GP77-0375-28 ..... p0259 N78-19112*#

H-916 ..... p0309 N78-20140*#
H-922 ..... p0246 N78-18076*#
H-940 ..... p0323 N78-21160*#
H-953 ..... p0089 N78-12100*#
H-956 ..... p0405 N78-25055*#
H-973 ..... p0305 N78-20114*#
H-991 ..... p0358 N78-23056*#
H-1003 ..... p0623 N78-33054*#
H-1008 ..... p0240 N78-18042*#
H-1035 ..... p0623 N78-33053*#
H-1059 ..... p0605 N78-32055*#

HAC-P76-527R ..... p0243 N78-18062 #
HAC-P77-197R ..... p0024 N78-10066 #
HAC-P77-383 ..... p0258 N78-19098 #

HAC-REF-C9383 ..... p0243 N78-18062 #

HAC-REF-D4443 ..... p0258 N78-19098 #
HAC-REF-D7344 ..... p0024 N78-10066 #

HDL-CR-77-129-1 ..... p0265 N78-19163 #

HEL-TM-3-78 ..... p0440 N78-26141 #
HEL-TM-24-77 ..... p0032 N78-10873 #

HEL-TN-12-77 ..... p0150 N78-15039 #

HH-76-219 ..... p0085 N78-12072 #
HH-76-281-VOL-1 ..... p0140 N78-14037 #
HH-76-281-VOL-2 ..... p0149 N78-15032 #
HH-77-41 ..... p0261 N78-19124 #
HH-77-307 ..... p0564 N78-31119 #

HONEYWELL-47212 ..... p0267 N78-19517 #

HSER-7342 ..... p0568 N78-31952 #

HUD-1 ..... p0495 N78-28979*#

HUD/RES-1305 ..... p0451 N78-27096 #

HUMRRO-PP-2-77 ..... p0044 N78-11127 #

HUMRRO-TR-77-2 ..... p0044 N78-11128 #

IC-AERO-77-102-VOL-1 ..... p0302 N78-20091 #
IC-AERO-77-102-VOL-2 ..... p0302 N78-20092 #
IC-AERO-77-102-VOL-3 ..... p0303 N78-20093 #

ICAF-977 ..... p0202 N78-16392 #
ICAF-978 ..... p0202 N78-16391 #
ICAF-1032 ..... p0411 N78-25454 #
ICAF-1040 ..... p0616 N78-32462 #

ICAS-PAPER-70-23 ..... p0018 N78-10011*#
ICAS-PAPER-74-29 ..... p0018 N78-10015*#

IDA/HQ-77-19470 ..... p0400 N78-24156 #
IDA/HQ-77-19573 ..... p0398 N78-24133 #
IDA/HQ-77-19873 ..... p0491 N78-28093 #

IFSM-78-88 ..... p0459 N78-27455 #

IIEQ-78/05 ..... p0617 N78-32620 #

IR-2 ..... p0410 N78-25199 #
IR-12-VOL-1 ..... p0611 N78-32099 #
IR-12-VOL-2 ..... p0611 N78-32100 #
IR-234 ..... p0490 N78-28079 #

ISBN-0-85679-183-0 ..... p0079 N78-12010
ISBN-0-85679-186-5 ..... p0084 N78-12066

ISBN-0-85679-203-9 ..... p0366 N78-23469
ISBN-2-7170-0423-8 ..... p0034 N78-11018 #
ISBN-2-7170-0425-4 ..... p0034 N78-11019 #
ISBN-2-7170-0449-1 ..... p0397 N78-24127 #
ISBN-2-7170-0450-5 ..... p0397 N78-24128 #
ISBN-2-7170-0451-3 ..... p0397 N78-24129 #
ISBN-2-7170-0452-1 ..... p0397 N78-24130 #
ISBN-2-7170-0453-X ..... p0397 N78-24131 #
ISBN-2-7170-0454-8 ..... p0351 N78-22092 #
ISBN-2-7170-0455-6 ..... p0348 N78-22073*#
ISBN-2-7170-0456-4 ..... p0353 N78-22109 #
ISBN-2-7170-0460-2 ..... p0403 N78-24587 #
ISBN-2-7170-0461-0 ..... p0355 N78-22223 #
ISBN-2-7170-0465-3 ..... p0355 N78-22240 #
ISBN-2-7170-0469-6 ..... p0355 N78-22383 #
ISBN-3-260-04048-X p0408 N78-25091
ISBN-92-835-0199-3 ..... p0041 N78-11083 #
ISBN-92-835-0207-8 ..... p0141 N78-14048 #
ISBN-92-835-0209-4 ..... p0319 N78-21118 #
ISBN-92-835-0211-6 ..... p0314 N78-21071 #
ISBN-92-835-0212-4 ..... p0345 N78-22033 #
ISBN-92-835-0213-2 ..... p0443 N78-26460 #
ISBN-92-835-0215-9 ..... p0549 N78-30099 #
ISBN-92-835-1253-7 ..... p0017 N78-10005 #
ISBN-92-835-1255-3 ..... p0153 N78-15311 #
ISBN-92-835-1259-6 ..... p0151 N78-15054 #
ISBN-92-835-1263-4 ..... p0142 N78-14052 #
ISBN-92-835-1264-2 ..... p0211 N78-17075 #
ISBN-92-835-1268-5 ..... p0211 N78-17074 #
ISBN-92-835-1269-3 ..... p0207 N78-17048 #
ISBN-92-835-1270-7 ..... p0211 N78-17076 #
ISBN-92-835-1271-5 ..... p0241 N78-18046 #
ISBN-92-835-1272-3 ..... p0261 N78-19126 #
ISBN-92-835-1273-1 ..... p0207 N78-17049 #
ISBN-92-835-1275-8 ..... p0351 N78-22093 #
ISBN-92-835-1278-2 ..... p0431 N78-26049 #
ISBN-92-835-1279-0 ..... p0438 N78-26115 #
ISBN-92-835-1282-0 ..... p0434 N78-26074 #
ISBN-92-835-1286-3 ..... p0491 N78-28088 #
ISBN-92-835-1289-8 ..... p0612 N78-32104 #
ISBN-92-835-1290-1 ..... p0565 N78-31126 #
ISBN-92-835-1295-2 ..... p0612 N78-32105 #
ISBN-92-835-1296-0 ..... p0608 N78-32074 #
ISBN-92-838-0203-5 ..... p0045 N78-11391 #

ISD-193 ..... p0310 N78-20551 #

ISSN-0082-5263 ..... p0081 N78-12029 #
ISSN-0309-6521 ..... p0361 N78-23090 #

ISU-ERI-AMES-78173 ..... p0564 N78-31118 #
ISU-ERI-AMES-78336 ..... p0442 N78-26153*#

ISVR-TR-92-PT-2 ..... p0367 N78-23882 #
ISVR-TR-93-PT-3 ..... p0367 N78-23883 #

JPL-PUB-78-43 ..... p0555 N78-30583*#

JPRS-71612 ..... p0621 N78-33015 #
JPRS-71659 ..... p0621 N78-33024 #

JSC-11525-VOL-1 ..... p0139 N78-14021*#
JSC-13792 ..... p0094 N78-13028*#

JTCG/AS-75-S-002 ..... p0317 N78-21099 #
JTCG/AS-76-S-001 ..... p0261 N78-19125 #
JTCG/AS-77-S-001 ..... p0212 N78-17084 #

KA-TR-137-VOL-1 ..... p0490 N78-28085 #
KA-TR-138 ..... p0307 N78-20122 #
KA-TR-139 ..... p0407 N78-25081 #
KA-TR-142 ..... p0494 N78-28484 #

KU-PRL-203 ..... p0152 N78-15055*#
KU-PRL-313-5 ..... p0406 N78-25078*#
KU-PRL-317-8 ..... p0567 N78-31873*#
KU-PRL-317-9 ..... p0567 N78-31874*#
KU-PRL-322-1 ..... p0633 N78-33444*#
KU-PRL-351-PT-B ..... p0305 N78-20111*#

L-7814 ..... p0450 N78-27079*#
L-7979 ..... p0393 N78-24078*#
L-7982 ..... p0393 N78-24079*#
L-8422 ..... p0393 N78-24080*#
L-8443 ..... p0393 N78-24077*#
L-10753 ..... p0194 N78-15999*#
L-11026 ..... p0299 N78-20065*#
L-11230 ..... p0093 N78-13015*#
L-11257 ..... p0544 N78-30056*#
L-11277 ..... p0081 N78-12037*#
L-11354 ..... p0299 N78-20064*#
L-11355 ..... p0099 N78-13071*#
L-11370 ..... p0299 N78-20063*#
L-11426 ..... p0020 N78-10034*#
L-11472 ..... p0037 N78-11052*#
L-11491 ..... p0022 N78-10045*#
L-11496 ..... p0093 N78-13016*#
L-11624 ..... p0442 N78-26392*#
L-11642 ..... p0146 N78-14997*#
L-11666 ..... p0197 N78-16042*#
L-11695 ..... p0092 N78-13011*#
L-11704 ..... p0022 N78-10049*#
L-11705 ..... p0235 N78-17997*#
L-11715 ..... p0082 N78-12041*#
L-11723 ..... p0081 N78-12038*#
L-11749 ..... p0037 N78-11053*#
L-11751 ..... p0020 N78-10030*#
L-11762 ..... p0309 N78-20142*#
L-11794 ..... p0301 N78-20078*#
L-11801 ..... p0194 N78-16000*#
L-11804 ..... p0082 N78-12040*#
L-11808 ..... p0095 N78-13043*#
L-11811 ..... p0362 N78-23094*#
L-11812 ..... p0024 N78-10062*#
L-11834 ..... p0094 N78-13029*#
L-11841 ..... p0366 N78-23389*#
L-11867 ..... p0097 N78-13054*#
L-11869 ..... p0251 N78-18823*#
L-11873 ..... p0301 N78-20079*#
L-11874 ..... p0345 N78-22028*#
L-11886 ..... p0092 N78-13014*#
L-11909 ..... p0250 N78-18459*#
L-11917 ..... p0081 N78-12033*
L-11918 ..... p0253 N78-19059*#
L-11927 ..... p0634 N78-33617*#
L-11943 ..... p0407 N78-25079*#
L-11947 ..... p0309 N78-20139*#
L-11956 ..... p0307 N78-20128*#
L-11959 ..... p0456 N78-27138*#
L-11960 ..... p0241 N78-18044*#
L-11963 ..... p0405 N78-25058*#
L-11966 ..... p0300 N78-20072*#
L-11980 ..... p0325 N78-21410*#
L-11981 ..... p0362 N78-23093*#
L-11982 ..... p0302 N78-20081*#
L-11984 ..... p0313 N78-21055*#
L-11996 ..... p0547 N78-30090*#
L-12006 ..... p0547 N78-30089*#
L-12008 ..... p0306 N78-20115*#
L-12014 ..... p0604 N78-32046*#
L-12015 ..... p0406 N78-25060*#
L-12043 ..... p0635 N78-33776*#
L-12057 ..... p0622 N78-33050*#
L-12060 ..... p0445 N78-26494*#
L-12063 ..... p0405 N78-25059*#
L-12064 ..... p0552 N78-30141*#
L-12066 ..... p0552 N78-30138*#
L-12081 ..... p0456 N78-27136*#
L-12102 ..... p0487 N78-28052*#
L-12110 ..... p0544 N78-30054*#
L-12159 ..... p0488 N78-28056*#
L-12165 ..... p0453 N78-27111*#
L-12177 ..... p0410 N78-25101*#
L-12178 ..... p0446 N78-27046*#
L-12178 ..... p0496 N78-29046*#
L-12190 ..... p0615 N78-32385*#
L-12197 ..... p0562 N78-31101*#
L-12200 ..... p0544 N78-30053*#
L-12210 ..... p0635 N78-33873*#
L-12215 ..... p0557 N78-31045*#
L-12219 ..... p0557 N78-31043*#
L-12234 ..... p0366 N78-23875*#
L-12235 ..... p0359 N78-23070*#
L-12249 ..... p0604 N78-32050*#
L-12263 ..... p0358 N78-23052*#
L-12270 ..... p0604 N78-32051*#
L-12274 ..... p0358 N78-23047*#
L-12275 ..... p0412 N78-25545*#
L-12277 ..... p0557 N78-31044*#
L-12283 ..... p0623 N78-33051*#
L-12288 ..... p0410 N78-25135*#
L-12297 ..... p0606 N78-32067*#
L-12339 ..... p0618 N78-32816*#
L-12455 ..... p0631 N78-33152*#

LBF-S-133 ..... p0046 N78-11426 #

LBF-TM-72/73 ..... p0145 N78-14409 #

LBP-TM-74/75 ..... p0145 N78-14408 #

LG77ER0102 ..... p0460 N78-27870*#
LG77ER0103 ..... p0446 N78-26880*#
LG77ER0198 ..... p0027 N78-10091*#
LG77ER0209 ..... p0148 N78-15015 #

LMSC-D555813-PT-3 ..... p0045 N78-11238 #

LMSC-HREC-TR-D568366 ..... p0631 N78-33134*#

LR-27543 ..... p0360 N78-23080*#
LR-27797 ..... p0101 N78-13478*#
LR-28112 ..... p0194 N78-16002*#
LR-28196 ..... p0504 N78-29509 #
LR-28200-VOL-1 ..... p0308 N78-20136*#
LR-28200-VOL-2 ..... p0309 N78-20137*#
LR-28200-VOL-3 ..... p0309 N78-20138*#
LR-28272-VOL-1 ..... p0633 N78-33483 #
LR-28272-VOL-3 ..... p0617 N78-32504 #
LR-28283 ..... p0316 N78-21095*#
LR-28306 ..... p0490 N78-28082 #
LR-28307-VOL-1 ..... p0560 N78-31088 #
LR-28307-VOL-2 ..... p0499 N78-29084 #
LR-28307-VOL-3 ..... p0499 N78-29085 #
LR-28384-VOL-1 ..... p0560 N78-31085*#
LR-28435-VOL-1 ..... p0543 N78-30042*#
LR-28435-VOL-2 ..... p0543 N78-30043*#
LR-28435-VOL-3 ..... p0543 N78-30044*#
LR-28461 ..... p0396 N78-24124 #
LR-28610-VOL-2 ..... p0613 N78-32188*#
LR-28611-VOL-1 ..... p0613 N78-32187*#
LR-28705 ..... p0625 N78-33086*#

LTR-ST-899 ..... p0202 N78-16392 #
LTR-ST-951 ..... p0202 N78-16391 #

LYC-77-26 ..... p0210 N78-17069 #
LYC-77-46 ..... p0362 N78-23097 #
LYC-77-56-VOL-1 ..... p0412 N78-25827*#
LYC-77-56-VOL-3 ..... p0412 N78-25829*#

M-263 ..... p0603 N78-32037*#

MAN-1031 ..... p0634 N78-33615 #

MBB-UF-1428-0 ..... p0477 A78-45227

MBB-UFE-1343 ..... p0189 A78-24419
MBB-UFE-1344 ..... p0189 A78-24410
MBB-UFE-1350 ..... p0191 A78-24439

MBB-UH-09-77 ..... p0190 A78-24426

MBB-UM-12-77 ..... p0189 A78-24417

MDC-E1734 ..... p0099 N78-13073 #

MDC-G7215 ..... p0254 N78-19065 #

MDC-J6944 ..... p0548 N78-30093 #
MDC-J7171 ..... p0317 N78-21101 #
MDC-J7340 ..... p0020 N78-10035*#
MDC-J7471 ..... p0324 N78-21223*#
MDC-J7615 ..... p0142 N78-14049 #
MDC-J7708 ..... p0028 N78-10093*#
MDC-J7727 ..... p0306 N78-20118*#
MDC-J7733 ..... p0312 N78-21047*#

MDC-Q0616 ..... p0325 N78-21358 #

ME-RT-77004 ..... p0194 N78-16021 #

MERADCOM-2218 ..... p0153 N78-15284 #
MERADCOM-2220 ..... p0248 N78-18226 #

MIT-78-2 ..... p0412 N78-25832*#

MRL-R-711 ..... p0451 N78-27092

MTI-76TR41-VOL-1 ..... p0563 N78-31111 #
MTI-76TR41-VOL-2 ..... p0502 N78-29108 #

MTP-2-2-601 ..... p0090 N78-12335 #
MTP-7-3-021 ..... p0500 N78-29091 #
MTP-7-3-500 ..... p0610 N78-32093 #
MTP-7-3-518 ..... p0500 N78-29091 #
MTP-7-3-520 ..... p0500 N78-29091 #

MTPR-3 ..... p0457 N78-27279 #
MTPR-6 ..... p0632 N78-33243 #

MTR-3174 ..... p0085 N78-12075 #
MTR-6951-VOL-2 ..... p0240 N78-18037 #
MTR-7047 ..... p0240 N78-18038 #
MTR-7115-REV-1 ..... p0240 N78-18036 #
MTR-7350-VOL-8 ..... p0489 N78-28077 #
MTR-7532 ..... p0196 N78-16031 #
MTR-7645 ..... p0196 N78-16032 #
MTR-7766 ..... p0566 N78-31130 #
MTR-7766-REV-1 ..... p0624 N78-33068 #
MTR-7837 ..... p0566 N78-31131 #

M77-52 ..... p0111 A78-17904 #
M77-59 ..... p0111 A78-17903 #

NA-77-180 ..... p0247 N78-18158 #
NA-77-389 ..... p0408 N78-25087 #
NA-77-729 ..... p0318 N78-21105 #
NA-77-938 ..... p0558 N78-31064 #
NA-78-24 ..... p0258 N78-19096*#

NAC-TR-2221 ..... p0458 N78-27337 #

NADC-13920-2 ..... p0562 N78-31098 #
NADC-75207-30-L ..... p0364 N78-23152 #
NADC-75340-40 ..... p0083 N78-12052 #
NADC-76045-40 ..... p0083 N78-12053 #
NADC-76077-30 ..... p0355 N78-22165 #
NADC-76083-30 ..... p0614 N78-32235 #
NADC-76105-30 ..... p0237 N78-18008 #
NADC-76114-30 ..... p0137 N78-14000 #
NADC-76153-30 ..... p0366 N78-23392 #
NADC-76201-30 ..... p0255 N78-19075 #
NADC-76240-20 ..... p0325 N78-21363 #
NADC-76341-30 ..... p0548 N78-30091 #
NADC-77080-30 ..... p0153 N78-15287 #
NADC-77165-30 ..... p0029 N78-10104 #
NADC-77182-30 ..... p0365 N78-23235 #
NADC-77187-30 ..... p0258 N78-19097 #
NADC-77209-40 ..... p0138 N78-14018 #
NADC-77229-30 ..... p0033 N78-11009 #
NADC-77252-30 ..... p0248 N78-18188 #
NADC-77264-30 ..... p0258 N78-19098 #
NADC-77272-60 ..... p0607 N78-32069 #
NADC-77287-60 ..... p0317 N78-21100 #
NADC-77292-60 ..... p0396 N78-24120 #
NADC-77328-60 ..... p0631 N78-33197 #
NADC-78032-60 ..... p0453 N78-27118 #
NADC-78055-60 ..... p0498 N78-29077 #

NAEC-AWS-571-REV-A ..... p0500 N78-29093 #

NAEC-ENG-7945 ..... p0503 N78-29112 #

NAEC-94-1140 ..... p0265 N78-19167 #

NAFI-TR-2195 ..... p0103 N78-13918 #
NAFI-TR-2201 ..... p0091 N78-12343 #

NAL-TR-412T ..... p0411 N78-25453 #
NAL-TR-498T ..... p0252 N78-19054 #
NAL-TR-517 ..... p0409 N78-25093 #
NAL-TR-526 ..... p0409 N78-25094 #

NAMRI-MONOGRAPH-23 ..... p0627 N78-33099 #

NAPC-PE-1 ..... p0264 N78-19162 #
NAPC-PE-2 ..... p0308 N78-20134 #

NAPTC-PE-88 ..... p0087 N78-12090 #
NAPTC-PE-106 ..... p0563 N78-31105*#
NAPTC-PE-108 ..... p0089 N78-12107 #
NAPTC-PE-110 ..... p0211 N78-17079 #
NAPTC-PE-112 ..... p0101 N78-13235 #

NASA-CASE-ARC-10903-1 ..... p0246 N78-18083*
NASA-CASE-ARC-11036-1 ..... p0616 N78-32395*
NASA-CASE-ARC-11040-2 ..... p0457 N78-27184*#

NASA-CASE-FRC-10113-1 ..... p0265 N78-19166*#
NASA-CASE-FRC-11007-1 ..... p0253 N78-19055*#
NASA-CASE-FRC-11009-1 ..... p0408 N78-25088*#

NASA-CASE-LAR-11201-1 ..... p0402 N78-24515*
NASA-CASE-LAR-11208-1 ..... p0617 N78-32539*
NASA-CASE-LAR-11688-1 ..... p0241 N78-18045*#

NASA-CASE-LAR-11932-1 ..... p0609 N78-32086*
NASA-CASE-LAR-12215-1 ..... p0210 N78-17070*#
NASA-CASE-LAR-12264-1 ..... p0613 N78-32168*#
NASA-CASE-LAR-12269-1 ..... p0630 N78-33123*#
NASA-CASE-LAR-12275-1 ..... p0354 N78-22115*#

NASA-CASE-LEW-11855-1 ..... p0408 N78-25090*
NASA-CASE-LEW-12131-2 ..... p0562 N78-31103*#
NASA-CASE-LEW-12137-1 ..... p0031 N78-10224*
NASA-CASE-LEW-12313-1 ..... p0032 N78-10468*
NASA-CASE-LEW-12317-1 ..... p0208 N78-17055*
NASA-CASE-LEW-12389-2 ..... p0244 N78-18066*
NASA-CASE-LEW-12452-1 ..... p0408 N78-25089*
NASA-CASE-LEW-12496-1 ..... p0627 N78-33101*
NASA-CASE-LEW-12917-1 ..... p0244 N78-18067*
NASA-CASE-LEW-12990-1 ..... p0454 N78-27122*#

NASA-CASE-MSC-16000-1 ..... p0402 N78-24544*

NASA-CASE-NPO-13886-1 ..... p0402 N78-24391*
NASA-CASE-NPO-14134-1 ..... p0271 N78-19898*#

NASA-CP-2017 ..... p0025 N78-10068*#
NASA-CP-2021 ..... p0038 N78-11063*#
NASA-CP-2032 ..... p0268 N78-19778*#
NASA-CP-2033 ..... p0266 N78-19325*#
NASA-CP-2036-PT-1 ..... p0446 N78-27046*#
NASA-CP-2036-PT-2 ..... p0496 N78-29046*#
NASA-CP-2052-PT-1 ..... p0618 N78-32816*#
NASA-CP-2054 ..... p0605 N78-32055*#
NASA-CP-2055 ..... p0635 N78-33776*#

NASA-CR-2743 ..... p0197 N78-16043*#
NASA-CR-2754 ..... p0101 N78-13478*#
NASA-CR-2812 ..... p0460 N78-27870*#
NASA-CR-2825 ..... p0306 N78-20116*#
NASA-CR-2828 ..... p0306 N78-20117*#
NASA-CR-2865 ..... p0194 N78-16002*#
NASA-CR-2907 ..... p0021 N78-10042*#
NASA-CR-2913 ..... p0197 N78-16044*#
NASA-CR-2914 ..... p0194 N78-16003*#
NASA-CR-2915 ..... p0203 N78-16998*#
NASA-CR-2918 ..... p0446 N78-26880*#
NASA-CR-2920 ..... p0152 N78-15058*#
NASA-CR-2933 ..... p0203 N78-16999*#
NASA-CR-2935 ..... p0152 N78-15055*#
NASA-CR-2944 ..... p0309 N78-20141*#
NASA-CR-2946 ..... p0236 N78-18000*#
NASA-CR-2949 ..... p0313 N78-21058*#
NASA-CR-2954 ..... p0311 N78-20920*#
NASA-CR-2960 ..... p0360 N78-23081*#
NASA-CR-2966 ..... p0487 N78-28043*#
NASA-CR-2967 ..... p0313 N78-21059*#
NASA-CR-2970 ..... p0306 N78-20118*#
NASA-CR-2971 ..... p0544 N78-30048*#
NASA-CR-2972 ..... p0544 N78-30049*#
NASA-CR-2977 ..... p0319 N78-21116*#
NASA-CR-2979 ..... p0317 N78-21096*#
NASA-CR-2987 ..... p0356 N78-22861*#
NASA-CR-2993 ..... p0405 N78-25057*#
NASA-CR-2994 ..... p0411 N78-25359*#
NASA-CR-2996 ..... p0441 N78-26149*#
NASA-CR-3001 ..... p0404 N78-24903*#
NASA-CR-3004 ..... p0544 N78-30050*#
NASA-CR-3015 ..... p0452 N78-27105*#
NASA-CR-3018 ..... p0621 N78-32836*#
NASA-CR-3020 ..... p0544 N78-30051*#
NASA-CR-3021 ..... p0446 N78-26881*#
NASA-CR-3027 ..... p0495 N78-28887*#
NASA-CR-3032 ..... p0492 N78-28098*#
NASA-CR-3034 ..... p0495 N78-28861*#
NASA-CR-3047 ..... p0606 N78-32066*#
NASA-CR-3050 ..... p0616 N78-32433*#
NASA-CR-3052 ..... p0603 N78-32037*#
NASA-CR-132333 ..... p0102 N78-13851*#
NASA-CR-132395 ..... p0194 N78-16015*#
NASA-CR-134738 ..... p0361 N78-23089*#
NASA-CR-134953 ..... p0627 N78-33103*#
NASA-CR-134954 ..... p0028 N78-10093*#
NASA-CR-135081 ..... p0407 N78-25080*#
NASA-CR-135195 ..... p0459 N78-27429*#
NASA-CR-135203 ..... p0027 N78-10092*#
NASA-CR-135215 ..... p0097 N78-13057*#
NASA-CR-135235 ..... p0041 N78-11081*#
NASA-CR-135236 ..... p0097 N78-13058*#
NASA-CR-135238 ..... p0235 N78-17991*#
NASA-CR-135239-VOL-1-SECT-1 ..... p0491 N78-28094*#
NASA-CR-135239-VOL-1-SECT-2 ..... p0491 N78-28095*#
NASA-CR-135239-VOL-1-SECT-3 ..... p0491 N78-28096*#
NASA-CR-135239-VOL-2 ..... p0492 N78-28097*#
NASA-CR-135240 ..... p0086 N78-12081*#
NASA-CR-135241 ..... p0086 N78-12082*#
NASA-CR-135252 ..... p0245 N78-18070*#
NASA-CR-135265 ..... p0086 N78-12083*#
NASA-CR-135273 ..... p0038 N78-11062*#
NASA-CR-135277 ..... p0150 N78-15041*#
NASA-CR-135293 ..... p0209 N78-17064*#
NASA-CR-135294 ..... p0209 N78-17065*#
NASA-CR-135295 ..... p0209 N78-17066*#
NASA-CR-135297 ..... p0141 N78-14047*#
NASA-CR-135300 ..... p0325 N78-21471*#
NASA-CR-135302 ..... p0212 N78-17390*#
NASA-CR-135304 ..... p0563 N78-31105*#
NASA-CR-135307 ..... p0459 N78-27427*#
NASA-CR-135313 ..... p0097 N78-13059*#
NASA-CR-135332 ..... p0198 N78-16052*#
NASA-CR-135334 ..... p0266 N78-19326*#
NASA-CR-135335 ..... p0410 N78-25235*#
NASA-CR-135343 ..... p0247 N78-18131*#
NASA-CR-135359 ..... p0208 N78-17058*#
NASA-CR-135360 ..... p0198 N78-16054*#
NASA-CR-135388 ..... p0351 N78-22096*#
NASA-CR-135391 ..... p0501 N78-29099*#
NASA-CR-135395 ..... p0454 N78-27124*#
NASA-CR-135404-VOL-1 ..... p0412 N78-25827*#
NASA-CR-135404-VOL-3 ..... p0412 N78-25829*#
NASA-CR-135407 ..... p0501 N78-29105*#
NASA-CR-135417 ..... p0501 N78-29104*#
NASA-CR-135427 ..... p0455 N78-27129*#
NASA-CR-135431 ..... p0551 N78-30121*#
NASA-CR-135434 ..... p0611 N78-32097*#
NASA-CR-135444 ..... p0563 N78-31108*#
NASA-CR-137925 ..... p0020 N78-10035*#
NASA-CR-143848 ..... p0142 N78-14054*#
NASA-CR-144863 ..... p0310 N78-20534*#
NASA-CR-144865 ..... p0349 N78-22076*#
NASA-CR-144866 ..... p0551 N78-30123*#
NASA-CR-144867 ..... p0551 N78-30124*#
NASA-CR-144868 ..... p0551 N78-30125*#
NASA-CR-144869 ..... p0551 N78-30126*#
NASA-CR-144870 ..... p0552 N78-30127*#
NASA-CR-144871 ..... p0552 N78-30128*#
NASA-CR-144872 ..... p0552 N78-30129*#
NASA-CR-144873 ..... p0552 N78-30130*#
NASA-CR-144874 ..... p0552 N78-30131*#
NASA-CR-144875 ..... p0501 N78-29101*#
NASA-CR-144876 ..... p0501 N78-29102*#
NASA-CR-144877 ..... p0633 N78-33444*#
NASA-CR-144984 ..... p0044 N78-11199*#
NASA-CR-144986 ..... p0360 N78-23080*#
NASA-CR-145143 ..... p0027 N78-10091*#
NASA-CR-145190 ..... p0303 N78-20094*#
NASA-CR-145192 ..... p0305 N78-20112*#
NASA-CR-145207 ..... p0022 N78-10047*#
NASA-CR-145214 ..... p0079 N78-12013*#
NASA-CR-145217-APP-1 ..... p0019 N78-10020*#
NASA-CR-145217-APP-2 ..... p0019 N78-10021*#
NASA-CR-145217-APP-3 ..... p0019 N78-10022*#
NASA-CR-145257 ..... p0099 N78-13076*#
NASA-CR-145260 ..... p0195 N78-16026*#
NASA-CR-145262 ..... p0404 N78-24900*#
NASA-CR-145267 ..... p0087 N78-12089*#
NASA-CR-145271 ..... p0143 N78-14055*#
NASA-CR-145272 ..... p0345 N78-22020*#
NASA-CR-145280 ..... p0312 N78-21053*#
NASA-CR-145281 ..... p0200 N78-16066*#
NASA-CR-145288 ..... p0235 N78-17990*#
NASA-CR-145298 ..... p0251 N78-18797*#
NASA-CR-145300 ..... p0389 N78-24043*#
NASA-CR-145301 ..... p0212 N78-17339*#
NASA-CR-145302 ..... p0251 N78-18874*#
NASA-CR-145303 ..... p0206 N78-17037*#
NASA-CR-145304 ..... p0235 N78-17993*#
NASA-CR-145305 ..... p0247 N78-18086*#
NASA-CR-145306 ..... p0235 N78-17994*#
NASA-CR-145311 ..... p0312 N78-21047*#
NASA-CR-145321 ..... p0258 N78-19096*#
NASA-CR-145322 ..... p0301 N78-20076*#
NASA-CR-145323 ..... p0301 N78-20077*#
NASA-CR-145326 ..... p0354 N78-22161*#
NASA-CR-145329 ..... p0406 N78-25068*#
NASA-CR-145331 ..... p0543 N78-30042*#
NASA-CR-145332 ..... p0543 N78-30043*#
NASA-CR-145333 ..... p0543 N78-30044*#
NASA-CR-145335 ..... p0316 N78-21093*#
NASA-CR-145342 ..... p0398 N78-24132*#
NASA-CR-145343 ..... p0413 N78-25985*#
NASA-CR-145344 ..... p0204 N78-17002*#

NASA-CR-145356 ..... p0608 N78-32079*#
NASA-CR-145359 ..... p0412 N78-25831*#
NASA-CR-145364 ..... p0405 N78-25054*#
NASA-CR-145369-VOL-1 ..... p0560 N78-31085*#
NASA-CR-145369-VOL-2 ..... p0560 N78-31086*#
NASA-CR-145376 ..... p0543 N78-30045*#
NASA-CR-145377 ..... p0499 N78-29083*#
NASA-CR-145378 ..... p0610 N78-32094*#
NASA-CR-145379 ..... p0498 N78-29082*#
NASA-CR-145381-1 ..... p0613 N78-32187*#
NASA-CR-145381-2 ..... p0613 N78-32188*#
NASA-CR-145382-1 ..... p0613 N78-32185*#
NASA-CR-145382-2 ..... p0613 N78-32186*#
NASA-CR-145383 ..... p0437 N78-26102*#
NASA-CR-148019 ..... p0019 N78-10017*#
NASA-CR-150822 ..... p0631 N78-33142*#
NASA-CR-150826 ..... p0631 N78-33134*#
NASA-CR-151573 ..... p0094 N78-13028*#
NASA-CR-151582 ..... p0139 N78-14021*#
NASA-CR-151734 ..... p0413 N78-25986*#
NASA-CR-151735 ..... p0413 N78-25987*#
NASA-CR-151951 ..... p0324 N78-21223*#
NASA-CR-151959 ..... p0625 N78-33085*#
NASA-CR-151972 ..... p0197 N78-16045*#
NASA-CR-152025 ..... p0024 N78-10060*#
NASA-CR-152026 ..... p0024 N78-10061*#
NASA-CR-152030 ..... p0020 N78-10027*#
NASA-CR-152032 ..... p0092 N78-13008*#
NASA-CR-152034 ..... p0022 N78-10046*#
NASA-CR-152040 ..... p0030 N78-10115*#
NASA-CR-152050 ..... p0095 N78-13038*#
NASA-CR-152051 ..... p0095 N78-13039*#
NASA-CR-152053 ..... p0092 N78-13007*#
NASA-CR-152054 ..... p0028 N78-10094*#
NASA-CR-152055 ..... p0252 N78-19049*#
NASA-CR-152056 ..... p0036 N78-11042*#
NASA-CR-152065 ..... p0030 N78-10116*#
NASA-CR-152066 ..... p0030 N78-10117*#
NASA-CR-152069 ..... p0213 N78-17931*#
NASA-CR-152072 ..... p0209 N78-17062*#
NASA-CR-152076 ..... p0271 N78-19899*#
NASA-CR-152079-VOL-1 ..... p0308 N78-20136*#
NASA-CR-152079-VOL-2 ..... p0309 N78-20137*#
NASA-CR-152079-VOL-3 ..... p0309 N78-20138*#
NASA-CR-152082 ..... p0311 N78-20918*#
NASA-CR-152083 ..... p0209 N78-17061*#
NASA-CR-152084 ..... p0256 N78-19082*#
NASA-CR-152086 ..... p0257 N78-19094*#
NASA-CR-152089 ..... p0348 N78-22074*#
NASA-CR-152091 ..... p0352 N78-22100*#
NASA-CR-152094 ..... p0209 N78-17063*#
NASA-CR-152096 ..... p0316 N78-21095*#
NASA-CR-152106 ..... p0252 N78-19050*#
NASA-CR-152107 ..... p0252 N78-19051*#
NASA-CR-152108 ..... p0252 N78-19052*#
NASA-CR-152109 ..... p0629 N78-33113*#
NASA-CR-152110 ..... p0629 N78-33114*#
NASA-CR-152111 ..... p0629 N78-33115*#
NASA-CR-152112 ..... p0629 N78-33116*#
NASA-CR-152113 ..... p0629 N78-33117*#
NASA-CR-152114 ..... p0629 N78-33118*#
NASA-CR-152115 ..... p0316 N78-21092*#
NASA-CR-152126 ..... p0450 N78-27087*#
NASA-CR-152134 ..... p0319 N78-21115*#
NASA-CR-152135 ..... p0323 N78-21161*#
NASA-CR-152139 ..... p0396 N78-24117*#
NASA-CR-152140 ..... p0348 N78-22071*#
NASA-CR-152141 ..... p0455 N78-27128*#
NASA-CR-152148 ..... p0413 N78-25979*#
NASA-CR-152150 ..... p0412 N78-25832*#
NASA-CR-152151 ..... p0546 N78-30070*#
NASA-CR-152164 ..... p0490 N78-28083*#
NASA-CR-152166 ..... p0451 N78-27094*#
NASA-CR-152181 ..... p0611 N78-32098*#
NASA-CR-152185 ..... p0612 N78-32106*#
NASA-CR-152196 ..... p0636 N78-33876*#
NASA-CR-155223 ..... p0034 N78-11022*#
NASA-CR-155266 ..... p0089 N78-12106*#
NASA-CR-155334 ..... p0101 N78-13476*#
NASA-CR-155363 ..... p0239 N78-18024*#
NASA-CR-155565 ..... p0207 N78-17050*#
NASA-CR-155566 ..... p0208 N78-17051*#
NASA-CR-155582 ..... p0197 N78-16046*#
NASA-CR-155589 ..... p0200 N78-16064*#
NASA-CR-155766 ..... p0235 N78-17995*#
NASA-CR-155771 ..... p0244 N78-18068*#
NASA-CR-155810 ..... p0258 N78-19099*#
NASA-CR-156067 ..... p0303 N78-20100*#
NASA-CR-156115 ..... p0304 N78-20102*#
NASA-CR-156119 ..... p0305 N78-20109*#
NASA-CR-156120 ..... p0300 N78-20067*#
NASA-CR-156121 ..... p0300 N78-20068*#
NASA-CR-156122 ..... p0300 N78-20069*#
NASA-CR-156123 ..... p0300 N78-20070*#
NASA-CR-156142 ..... p0305 N78-20110*#
NASA-CR-156143 ..... p0305 N78-20111*#
NASA-CR-156171 ..... p0324 N78-21326*#
NASA-CR-156182 ..... p0356 N78-22858*#
NASA-CR-156839 ..... p0213 N78-17915*#
NASA-CR-156930 ..... p0413 N78-25966*#
NASA-CR-156945 ..... p0502 N78-29110*#
NASA-CR-157012 ..... p0403 N78-24808*#
NASA-CR-157111 ..... p0456 N78-27141*#
NASA-CR-157210 ..... p0406 N78-25078*#
NASA-CR-157214 ..... p0409 N78-25092*#
NASA-CR-157237 ..... p0442 N78-26153*#
NASA-CR-157355 ..... p0499 N78-29086*#
NASA-CR-157402 ..... p0545 N78-30069*#
NASA-CR-157470 ..... p0504 N78-29699*#
NASA-CR-157563 ..... p0555 N78-30583*#
NASA-CR-157578 ..... p0563 N78-31107*#
NASA-CR-157582 ..... p0558 N78-31068*#
NASA-CR-157587 ..... p0567 N78-31874*#
NASA-CR-157588 ..... p0567 N78-31873*#
NASA-CR-157736 ..... p0609 N78-32080*#
NASA-CR-157745 ..... p0622 N78-33048*#
NASA-CR-157777 ..... p0633 N78-33405*#
NASA-CR-158896 ..... p0495 N78-28830*#
NASA-CR-158901 ..... p0405 N78-25056*#
NASA-CR-158904 ..... p0487 N78-28054*#
NASA-CR-158909 ..... p0552 N78-30139*#
NASA-CR-158929 ..... p0609 N78-32087*#
NASA-CR-158932 ..... p0604 N78-32047*#
NASA-CR-158935 ..... p0625 N78-33086*#
NASA-CR-158958 ..... p0626 N78-33087*#
NASA-CR-159390 ..... p0501 N78-29103*#
NASA-CR-159402 ..... p0563 N78-31106*#
NASA-CR-159415 ..... p0628 N78-33104*#
NASA-CR-159424 ..... p0610 N78-32096*#
NASA-CR-159433 ..... p0633 N78-33478*#

NASA-RP-1008 ..... p0035 N78-11024*#
NASA-RP-1020 ..... p0404 N78-25048*#
NASA-RP-1026 ..... p0556 N78-30774*#

NASA-SP-394 ..... p0033 N78-11007*#
NASA-SP-406 ..... p0389 N78-24046*#
NASA-SP-409 ..... p0079 N78-12017*#

NASA-TM-X-2336 ..... p0450 N78-27079*#
NASA-TM-X-2469 ..... p0393 N78-24079*#
NASA-TM-X-2470 ..... p0393 N78-24078*#
NASA-TM-X-2633 ..... p0393 N78-24080*#
NASA-TM-X-2634 ..... p0393 N78-24077*#
NASA-TM-X-3483 ..... p0098 N78-13063*#
NASA-TM-X-3561 ..... p0037 N78-11052*#
NASA-TM-X-62360 ..... p0019 N78-10019*#
NASA-TM-X-72794 ..... p0140 N78-14031*#
NASA-TM-X-73647 ..... p0020 N78-10026*#
NASA-TM-X-73648 ..... p0028 N78-10097*#
NASA-TM-X-73917 ..... p0543 N78-30046*#
NASA-TM-X-74027 ..... p0043 N78-11121*#
NASA-TM-X-74038 ..... p0208 N78-17057*#
NASA-TM-X-74945 ..... p0089 N78-12105*#

NASA-TM-58210 ..... p0613 N78-32177*#
NASA-TM-72656 ..... p0406 N78-25069*#
NASA-TM-72674 ..... p0358 N78-23052*#
NASA-TM-72851 ..... p0245 N78-18075*#
NASA-TM-72853 ..... p0240 N78-18042*#
NASA-TM-72855 ..... p0405 N78-25055*#
NASA-TM-73223 ..... p0239 N78-18025*#
NASA-TM-73224 ..... p0303 N78-20098*#
NASA-TM-73250 ..... p0079 N78-12011*#
NASA-TM-73271 ..... p0199 N78-16062*#
NASA-TM-73507-VOL-1 ..... p0501 N78-29100*#
NASA-TM-73652 ..... p0206 N78-17041*#
NASA-TM-73714 ..... p0028 N78-10098*#
NASA-TM-73732 ..... p0151 N78-15042*#
NASA-TM-73735 ..... p0101 N78-13439*#
NASA-TM-73750 ..... p0212 N78-17558*#
NASA-TM-73780 ..... p0097 N78-13056*#
NASA-TM-73798 ..... p0098 N78-13060*#
NASA-TM-73809 ..... p0102 N78-13853*#
NASA-TM-73816 ..... p0102 N78-13854*#
NASA-TM-73818 ..... p0151 N78-15044*#
NASA-TM-73823 ..... p0155 N78-15852*#
NASA-TM-73829 ..... p0101 N78-13233*#

NASA-TM-73831 ..... p0199 N78-16055*#
NASA-TM-73836 ..... p0212 N78-17229*#
NASA-TM-73838 ..... p0098 N78-13061*#
NASA-TM-73842 ..... p0264 N78-19157*#
NASA-TM-73848 ..... p0151 N78-15043*#
NASA-TM-73849 ..... p0098 N78-13062*#
NASA-TM-73860 ..... p0213 N78-17921*
NASA-TM-73875 ..... p0208 N78-17059*#
NASA-TM-73878 ..... p0264 N78-19158*#
NASA-TM-73884 ..... p0208 N78-17060*#
NASA-TM-73890 ..... p0318 N78-21109*#
NASA-TM-73959 ..... p0445 N78-26877*#
NASA-TM-74033 ..... p0604 N78-32049*#
NASA-TM-74040 ..... p0247 N78-18084*#
NASA-TM-74049 ..... p0300 N78-20071*#
NASA-TM-74050 ..... p0092 N78-13010*#
NASA-TM-74055 ..... p0095 N78-13040*#
NASA-TM-74057 ..... p0024 N78-10062*#
NASA-TM-74058 ..... p0300 N78-20072*#
NASA-TM-74059 ..... p0147 N78-15002*#
NASA-TM-74071 ..... p0437 N78-26103*#
NASA-TM-74073 ..... p0019 N78-10023*#
NASA-TM-74078 ..... p0033 N78-11004*#
NASA-TM-74083 ..... p0032 N78-10839*#
NASA-TM-74089 ..... p0031 N78-10306*#
NASA-TM-74090 ..... p0081 N78-12033*
NASA-TM-74092 ..... p0312 N78-21049*#
NASA-TM-74093 ..... p0300 N78-20073*#
NASA-TM-74097 ..... p0092 N78-13011*#
NASA-TM-75038 ..... p0206 N78-17042*#
NASA-TM-75059 ..... p0033 N78-11003*#
NASA-TM-75063 ..... p0240 N78-18041*#
NASA-TM-75138 ..... p0038 N78-11061*#
NASA-TM-75152 ..... p0617 N78-32642*#
NASA-TM-75156 ..... p0043 N78-11119*#
NASA-TM-75160 ..... p0079 N78-12012*#
NASA-TM-75161 ..... p0042 N78-11114*#
NASA-TM-75181 ..... p0086 N78-12080*#
NASA-TM-75196 ..... p0252 N78-19048*#
NASA-TM-75201 ..... p0252 N78-19053*#
NASA-TM-75205 ..... p0208 N78-17053*#
NASA-TM-75216 ..... p0087 N78-12085*#
NASA-TM-75217 ..... p0087 N78-12086*#
NASA-TM-75232 ..... p0198 N78-16051*#
NASA-TM-75244 ..... p0364 N78-23106*#
NASA-TM-75263 ..... p0264 N78-19159*#
NASA-TM-75264 ..... p0264 N78-19156*#
NASA-TM-75272 ..... p0312 N78-21048*#
NASA-TM-75277 ..... p0393 N78-24084*#
NASA-TM-75282 ..... p0438 N78-26105*#
NASA-TM-75287 ..... p0398 N78-24142*#
NASA-TM-75293 ..... p0396 N78-24116*#
NASA-TM-75294 ..... p0394 N78-24085*#
NASA-TM-75302 ..... p0614 N78-32265*#
NASA-TM-75305 ..... p0457 N78-27185*#
NASA-TM-75306 ..... p0445 N78-26493*#
NASA-TM-75323 ..... p0605 N78-32054*#
NASA-TM-75324 ..... p0450 N78-27081*#
NASA-TM-75440 ..... p0604 N78-32052*#
NASA-TM-75447 ..... p0615 N78-32384*#
NASA-TM-75448 ..... p0616 N78-32427*#
NASA-TM-75457 ..... p0614 N78-32264*#
NASA-TM-75535 ..... p0603 N78-32043*#
NASA-TM-75577 ..... p0631 N78-33140*
NASA-TM-78141 ..... p0079 N78-12014*#
NASA-TM-78195 ..... p0613 N78-32173*#
NASA-TM-78327 ..... p0153 N78-15324*#
NASA-TM-78330 ..... p0348 N78-22073*#
NASA-TM-78427 ..... p0137 N78-13998*#
NASA-TM-78432 ..... p0152 N78-15056*#
NASA-TM-78438 ..... p0345 N78-22025*#
NASA-TM-78439 ..... p0095 N78-13037*#
NASA-TM-78443 ..... p0017 N78-10002*#
NASA-TM-78446 ..... p0253 N78-19058*#
NASA-TM-78449 ..... p0622 N78-33043*#
NASA-TM-78452 ..... p0305 N78-20113*#
NASA-TM-78459 ..... p0240 N78-18043*#
NASA-TM-78464 ..... p0487 N78-28053*#
NASA-TM-78468 ..... p0324 N78-21214*#
NASA-TM-78469 ..... p0271 N78-19868*#
NASA-TM-78471 ..... p0253 N78-19056*#
NASA-TM-78473 ..... p0311 N78-20917*#
NASA-TM-78474 ..... p0316 N78-21094*#
NASA-TM-78475 ..... p0323 N78-21159*#
NASA-TM-78476 ..... p0406 N78-25071*#
NASA-TM-78479 ..... p0497 N78-29067*#
NASA-TM-78480 ..... p0438 N78-26106*#
NASA-TM-78489 ..... p0496 N78-29044*#
NASA-TM-78492 ..... p0498 N78-29068*#
NASA-TM-78497 ..... p0439 N78-26133*#
NASA-TM-78498 ..... p0446 N78-27043*#
NASA-TM-78500 ..... p0437 N78-26101*#
NASA-TM-78511 ..... p0608 N78-32075*#
NASA-TM-78512 ..... p0495 N78-28979*#
NASA-TM-78519 ..... p0546 N78-30072*#
NASA-TM-78530 ..... p0603 N78-32044*#
NASA-TM-78624 ..... p0035 N78-11023*#
NASA-TM-78629 ..... p0095 N78-13041*#
NASA-TM-78634 ..... p0095 N78-13042*#
NASA-TM-78637 ..... p0152 N78-15060*#
NASA-TM-78638 ..... p0253 N78-19059*#
NASA-TM-78641 ..... p0364 N78-23105*#
NASA-TM-78645 ..... p0147 N78-15001*#
NASA-TM-78647 ..... p0153 N78-15325*#
NASA-TM-78648 ..... p0247 N78-18085*#
NASA-TM-78653 ..... p0551 N78-30122*#
NASA-TM-78657 ..... p0318 N78-21107*#
NASA-TM-78659 ..... p0235 N78-17992*#
NASA-TM-78660 ..... p0251 N78-18873*#
NASA-TM-78663 ..... p0309 N78-20144*#
NASA-TM-78664 ..... p0557 N78-31043*#
NASA-TM-78665 ..... p0312 N78-21050*#
NASA-TM-78666 ..... p0301 N78-20074*#
NASA-TM-78671 ..... p0312 N78-21052*#
NASA-TM-78672 ..... p0305 N78-20108*#
NASA-TM-78676 ..... p0311 N78-20919*#
NASA-TM-78677 ..... p0299 N78-20061*#
NASA-TM-78678 ..... p0552 N78-30138*#
NASA-TM-78679 ..... p0431 N78-26048*#
NASA-TM-78680 ..... p0301 N78-20075*#
NASA-TM-78683 ..... p0312 N78-21051*#
NASA-TM-78684 ..... p0358 N78-23054*#
NASA-TM-78685 ..... p0359 N78-23070*#
NASA-TM-78686 ..... p0487 N78-28052*#
NASA-TM-78689 ..... p0310 N78-20481*#
NASA-TM-78692 ..... p0318 N78-21104*#
NASA-TM-78695 ..... p0358 N78-23047*#
NASA-TM-78696 ..... p0412 N78-25545*#
NASA-TM-78699 ..... p0604 N78-32046*#
NASA-TM-78700 ..... p0366 N78-23875*#
NASA-TM-78705 ..... p0450 N78-27084*#
NASA-TM-78706 ..... p0604 N78-32050*#
NASA-TM-78708 ..... p0366 N78-23876*#
NASA-TM-78712 ..... p0348 N78-22075*#
NASA-TM-78716 ..... p0410 N78-25135*#
NASA-TM-78717 ..... p0460 N78-27871*#
NASA-TM-78719 ..... p0631 N78-33152*#
NASA-TM-78720 ..... p0492 N78-28101*#
NASA-TM-78722 ..... p0437 N78-26096*#
NASA-TM-78724 ..... p0623 N78-33060*#
NASA-TM-78726 ..... p0547 N78-30087*#
NASA-TM-78729 ..... p0557 N78-31044*#
NASA-TM-78730 ..... p0457 N78-27183*#
NASA-TM-78736 ..... p0635 N78-33873*#
NASA-TM-78737 ..... p0604 N78-32051*#
NASA-TM-78741 ..... p0450 N78-27085*#
NASA-TM-78742 ..... p0546 N78-30073*#
NASA-TM-78744 ..... p0451 N78-27100*#
NASA-TM-78745 ..... p0546 N78-30074*#
NASA-TM-78746 ..... p0543 N78-30039*#
NASA-TM-78750 ..... p0543 N78-30040*#
NASA-TM-78756 ..... p0555 N78-30291*#
NASA-TM-78758 ..... p0494 N78-28680*#
NASA-TM-78760 ..... p0543 N78-30041*#
NASA-TM-78766 ..... p0556 N78-30606*#
NASA-TM-78767 ..... p0604 N78-32048*#
NASA-TM-78769 ..... p0635 N78-33874*#
NASA-TM-78774 ..... p0624 N78-33061*#
NASA-TM-78776 ..... p0618 N78-32815*#
NASA-TM-78777 ..... p0608 N78-32076*#
NASA-TM-78780 ..... p0622 N78-33045*#
NASA-TM-78781 ..... p0622 N78-33046*#
NASA-TM-78787 ..... p0622 N78-33047*#
NASA-TM-78865 ..... p0401 N78-24370*#
NASA-TM-78866 ..... p0401 N78-24369*#
NASA-TM-78868 ..... p0352 N78-22099*#
NASA-TM-78870 ..... p0351 N78-22098*#
NASA-TM-78873 ..... p0398 N78-24137*#
NASA-TM-78874 ..... p0398 N78-24138*#
NASA-TM-78875 ..... p0440 N78-26143*#
NASA-TM-78878 ..... p0403 N78-24897*#
NASA-TM-78889 ..... p0361 N78-23088*#
NASA-TM-78899 ..... p0437 N78-26099*#
NASA-TM-78906 ..... p0441 N78-26145*#
NASA-TM-78907 ..... p0442 N78-26446*#
NASA-TM-78915 ..... p0445 N78-26552*#
NASA-TM-78917 ..... p0456 N78-27143*#
NASA-TM-78918 ..... p0496 N78-28986*#

NASA-TM-78920 ..... p0437 N78-26100*#
NASA-TM-78928 ..... p0441 N78-26144*#
NASA-TM-78951 ..... p0454 N78-27126*#
NASA-TM-78954 ..... p0456 N78-27142*#
NASA-TM-78955 ..... p0454 N78-27125*#
NASA-TM-78958 ..... p0456 N78-27137*#
NASA-TM-78962 ..... p0454 N78-27127*#
NASA-TM-78967 ..... p0503 N78-29215*#
NASA-TM-78983 ..... p0558 N78-31061*#
NASA-TM-78992 ..... p0632 N78-33283*#
NASA-TM-79009 ..... p0627 N78-33102*#
NASA-TM-79449 ..... p0401 N78-24292*#
NASA-TM-79510 ..... p0442 N78-26223*
NASA-TM-79523 ..... p0451 N78-27093*#

NASA-TN-D-8235 ..... p0194 N78-15999*#
NASA-TN-D-8449 ..... p0081 N78-12037*#
NASA-TN-D-8473 ..... p0299 N78-20064*#
NASA-TN-D-8474 ..... p0299 N78-20065*#
NASA-TN-D-8478 ..... p0299 N78-20063*#
NASA-TN-D-8512 ..... p0093 N78-13015*#
NASA-TN-D-8518 ..... p0022 N78-10045*#

NASA-TP-1007 ..... p0198 N78-16053*#
NASA-TP-1022 ..... p0197 N78-16042*#
NASA-TP-1025 ..... p0022 N78-10049*#
NASA-TP-1027 ..... p0093 N78-13016*#
NASA-TP-1040 ..... p0199 N78-16063*#
NASA-TP-1042 ..... p0020 N78-10034*#
NASA-TP-1043 ..... p0099 N78-13071*#
NASA-TP-1044 ..... p0081 N78-12038*#
NASA-TP-1046 ..... p0037 N78-11053*#
NASA-TP-1050 ..... p0020 N78-10030*#
NASA-TP-1057 ..... p0033 N78-11008*#
NASA-TP-1065 ..... p0146 N78-14997*#
NASA-TP-1068 ..... p0041 N78-11106*#
NASA-TP-1069 ..... p0318 N78-21112*#
NASA-TP-1076 ..... p0082 N78-12040*#
NASA-TP-1078 ..... p0082 N78-12041*#
NASA-TP-1080 ..... p0095 N78-13043*#
NASA-TP-1085 ..... p0097 N78-13054*#
NASA-TP-1087 ..... p0442 N78-26392*#
NASA-TP-1090 ..... p0092 N78-13014*#
NASA-TP-1091 ..... p0032 N78-11002*#
NASA-TP-1094 ..... p0098 N78-13064*#
NASA-TP-1100 ..... p0204 N78-17000*#
NASA-TP-1102 ..... p0194 N78-16000*#
NASA-TP-1107 ..... p0089 N78-12100*#
NASA-TP-1109 ..... p0194 N78-16001*#
NASA-TP-1110 ..... p0352 N78-22101*#
NASA-TP-1112 ..... p0094 N78-13029*#
NASA-TP-1116 ..... p0309 N78-20139*#
NASA-TP-1118 ..... p0251 N78-18823*#
NASA-TP-1119 ..... p0235 N78-17997*#
NASA-TP-1120 ..... p0313 N78-21055*#
NASA-TP-1122 ..... p0301 N78-20078*#
NASA-TP-1124 ..... p0301 N78-20079*#
NASA-TP-1126 ..... p0146 N78-14998*#
NASA-TP-1132 ..... p0236 N78-17998*#
NASA-TP-1135 ..... p0241 N78-18044*#
NASA-TP-1136 ..... p0301 N78-20080*#
NASA-TP-1137 ..... p0250 N78-18459*#
NASA-TP-1140 ..... p0309 N78-20143*#
NASA-TP-1143 ..... p0366 N78-23389*#
NASA-TP-1146 ..... p0307 N78-20128*#
NASA-TP-1147 ..... p0309 N78-20142*#
NASA-TP-1148 ..... p0246 N78-18076*#
NASA-TP-1151 ..... p0308 N78-20130*#
NASA-TP-1153 ..... p0236 N78-17999*#
NASA-TP-1157 ..... p0306 N78-20115*#
NASA-TP-1158 ..... p0407 N78-25079*#
NASA-TP-1159 ..... p0362 N78-23093*#
NASA-TP-1163 ..... p0302 N78-20081*#
NASA-TP-1167 ..... p0309 N78-20140*#
NASA-TP-1168 ..... p0325 N78-21410*#
NASA-TP-1171 ..... p0305 N78-20114*#
NASA-TP-1174 ..... p0362 N78-23094*#
NASA-TP-1175 ..... p0345 N78-22028*#
NASA-TP-1180 ..... p0323 N78-21160*#
NASA-TP-1183 ..... p0405 N78-25058*#
NASA-TP-1184 ..... p0456 N78-27138*#
NASA-TP-1189 ..... p0405 N78-25059*#
NASA-TP-1199 ..... p0308 N78-20132*#
NASA-TP-1202 ..... p0325 N78-21473*#
NASA-TP-1204 ..... p0308 N78-20133*#
NASA-TP-1205 ..... p0318 N78-21114*#
NASA-TP-1206 ..... p0456 N78-27136*#
NASA-TP-1208 ..... p0615 N78-32385*#
NASA-TP-1210 ..... p0445 N78-26494*#
NASA-TP-1213 ..... p0488 N78-28056*#
NASA-TP-1214 ..... p0547 N78-30089*#
NASA-TP-1215 ..... p0406 N78-25060*#
NASA-TP-1216 ..... p0547 N78-30090*#
NASA-TP-1228 ..... p0362 N78-23095*#
NASA-TP-1233 ..... p0544 N78-30053*#
NASA-TP-1234 ..... p0410 N78-25101*#
NASA-TP-1237 ..... p0363 N78-23100*#
NASA-TP-1240 ..... p0453 N78-27111*#
NASA-TP-1241 ..... p0544 N78-30054*#
NASA-TP-1242 ..... p0552 N78-30141*#
NASA-TP-1244 ..... p0358 N78-23056*#
NASA-TP-1252 ..... p0557 N78-31045*#
NASA-TP-1253 ..... p0544 N78-30056*#
NASA-TP-1254 ..... p0441 N78-26151*#
NASA-TP-1260 ..... p0455 N78-27130*#
NASA-TP-1261 ..... p0556 N78-30896*#
NASA-TP-1267 ..... p0453 N78-27113*#
NASA-TP-1270 ..... p0623 N78-33051*#
NASA-TP-1275 ..... p0634 N78-33617*#
NASA-TP-1276 ..... p0562 N78-31101*#
NASA-TP-1291 ..... p0622 N78-33050*#
NASA-TP-1294 ..... p0545 N78-30057*#
NASA-TP-1295 ..... p0628 N78-33110*#
NASA-TP-1298 ..... p0628 N78-33107*#
NASA-TP-1314 ..... p0628 N78-33109*#
NASA-TP-1316 ..... p0606 N78-32067*#
NASA-TP-1331 ..... p0623 N78-33053*#
NASA-TP-1336 ..... p0623 N78-33054*#
NASA-TP-1337 ..... p0628 N78-33108*#
NASA-TP-1340 ..... p0634 N78-33618*#

NASA-TT-F-17158 ..... p0450 N78-27086*#

NATC-TM-77-2-SA ..... p0023 N78-10053 #
NATC-TM-78-1-SY ..... p0455 N78-27133 #
NATC-TM-78-2-RW ..... p0407 N78-25084 #
NATC-TM-78-2-SA ..... p0557 N78-31046 #

NATF-EN-1137 ..... p0043 N78-11123 #

NATICK/TR-78/011 ..... p0492 N78-28278 #

NAVTRAEQUIPC-IH-262 ..... p0031 N78-10126 #

NAVTRAEQUIPC-74-C-0141-1 ..... p0247 N78-18087 #
NAVTRAEQUIPC-75-C-0009 ..... p0152 N78-15061 #
NAVTRAEQUIPC-76-C-0034-1 ..... p0212 N78-17082 #

NBSIR-77-1386 ..... p0402 N78-24385 #
NBSIR-77-1386 ..... p0454 N78-27119 #
NBSIR-78-1434 ..... p0364 N78-23214 #

NCSU/EDC-77-1 ..... p0142 N78-14050 #

NEAR-TR-134 ..... p0405 N78-25057*#
NEAR-TR-141 ..... p0205 N78-17028 #
NEAR-TR-157 ..... p0544 N78-30050*#
NEAR-TR-171 ..... p0636 N78-33876*#

NGTE-R-345 ..... p0046 N78-11802 #

NISC-TRANS-3945 ..... p0084 N78-12069 #
NISC-TRANS-3947 ..... p0023 N78-10055 #

NLR-MP-76023-U ..... p0248 N78-18289 #
NLR-MP-77002-U ..... p0145 N78-14449 #
NLR-MP-77005-U ..... p0494 N78-28494 #
NLR-MP-77008-U ..... p0438 N78-26113 #
NLR-MP-77011-U ..... p0500 N78-29096 #
NLR-MP-77012-U ..... p0238 N78-18019 #
NLR-MP-77015-U ..... p0246 N78-18080 #
NLR-MP-77025-U ..... p0498 N78-29073 #
NLR-MP-78011-U ..... p0477 A78-45230 #

NLR-TR-75115-U ..... p0237 N78-18009 #
NLR-TR-76008-U ..... p0410 N78-25199 #
NLR-TR-76083-U ..... p0445 N78-26507 #
NLR-TR-76096-U ..... p0556 N78-30620 #
NLR-TR-76104 ..... p0556 N78-30620 #
NLR-TR-76130-U ..... p0494 N78-28495 #
NLR-TR-76131-U ..... p0361 N78-23085 #
NLR-TR-76132-U ..... p0438 N78-26111 #
NLR-TR-76133-U ..... p0243 N78-18056 #
NLR-TR-76139-U ..... p0491 N78-28087 #
NLR-TR-76150-U ..... p0155 N78-15859 #
NLR-TR-77046-U ..... p0488 N78-28059 #
NLR-TR-77090-U ..... p0498 N78-29074 #

NOAA-TM-EBL-WPL-28 ..... p0356 N78-22551 #

NOAA-77101302 ..... p0239 N78-18024*#
NOAA-78042004 ..... p0635 N78-33692 #

NOR-74-309-PT-2-VOL-2 ..... p0154 N78-15521 #
NOR-76-223 ..... p0265 N78-19165 #
NOR-77-115 ..... p0504 N78-29457 #
NOR-78-24 ..... p0487 N78-28054*#

NOSC/TR-174 ..... p0355 N78-22285 #
NOSC/TR-198 ..... p0402 N78-24418 #

NOTE-77-30 ..... p0348 N78-22073*#

NPL-AC-81 ..... p0367 N78-23885 #
NPL-AC-83 ..... p0362 N78-23098 #

NPL-QU-39 ..... p0154 N78-15635 #

NPS-67LI77091 ..... p0317 N78-21102 #
NPS-67NT77091 ..... p0324 N78-21166 #
NPS-67NT78061 ..... p0611 N78-32101 #
NPS-67SX77111 ..... p0237 N78-18005 #
NPS-69-77-004 ..... p0255 N78-19076 #
NPS-69-78-010-PT-2 ..... p0611 N78-32102 #

NPS52-78-001 ..... p0627 N78-33098 #
NPS69-78-009 ..... p0629 N78-33111 #

NRL-MP-78016-U ..... p0477 A78-45228 #

NRL-MR-3671 ..... p0399 N78-24143 #
NRL-MR-3721 ..... p0503 N78-29154 #

NRL-8204 ..... p0457 N78-27278 #

NR77H-18 ..... p0366 N78-23392 #
NR78H-10 ..... p0352 N78-22100*#

NSWC/DL-TR-3615 ..... p0082 N78-12046 #
NSWC/DL-TR-3808 ..... p0631 N78-33132 #

NT-77-CN-1 ..... p0299 N78-20060

NTIS/PS-74/106 ..... p0634 N78-33634 #
NTIS/PS-75/116 ..... p0459 N78-27380 #
NTIS/PS-75/224 ..... p0406 N78-25067 #
NTIS/PS-75/351 ..... p0412 N78-25840 #
NTIS/PS-75/376 ..... p0609 N78-32085 #
NTIS/PS-75/410 ..... p0617 N78-32604 #
NTIS/PS-75/530 ..... p0634 N78-33639 #
NTIS/PS-75/544 ..... p0634 N78-33634 #
NTIS/PS-76/0042 ..... p0412 N78-25787 #
NTIS/PS-76/0175 ..... p0410 N78-25100 #
NTIS/PS-76/0176 ..... p0410 N78-25099 #
NTIS/PS-76/0235 ..... p0412 N78-25840 #
NTIS/PS-76/0259 ..... p0406 N78-25067 #
NTIS/PS-76/0334 ..... p0459 N78-27380 #
NTIS/PS-76/0392 ..... p0617 N78-32604 #
NTIS/PS-76/0495 ..... p0609 N78-32085 #
NTIS/PS-76/0538 ..... p0624 N78-33066 #
NTIS/PS-76/0585 ..... p0634 N78-33634 #
NTIS/PS-76/0625 ..... p0634 N78-33639 #
NTIS/PS-77/0126 ..... p0412 N78-25787 #
NTIS/PS-77/0203 ..... p0412 N78-25840 #
NTIS/PS-77/0218 ..... p0410 N78-25100 #
NTIS/PS-77/0219 ..... p0410 N78-25099 #
NTIS/PS-77/0317 ..... p0406 N78-25067 #
NTIS/PS-77/0342 ..... p0459 N78-27380 #
NTIS/PS-77/0374 ..... p0451 N78-27091 #
NTIS/PS-77/0375 ..... p0607 N78-32073 #
NTIS/PS-77/0441 ..... p0503 N78-29114 #
NTIS/PS-77/0489 ..... p0617 N78-32604 #
NTIS/PS-77/0552 ..... p0634 N78-33600 #
NTIS/PS-77/0567 ..... p0609 N78-32085 #
NTIS/PS-77/0606 ..... p0624 N78-33066 #
NTIS/PS-77/0653 ..... p0634 N78-33634 #
NTIS/PS-77/0704 ..... p0634 N78-33639 #
NTIS/PS-77/0800 ..... p0630 N78-33122 #
NTIS/PS-77/0801 ..... p0632 N78-33278 #
NTIS/PS-78/0238 ..... p0410 N78-25100 #
NTIS/PS-78/0239 ..... p0410 N78-25099 #
NTIS/PS-78/0240 ..... p0412 N78-25840 #
NTIS/PS-78/0289 ..... p0412 N78-25787 #
NTIS/PS-78/0320 ..... p0406 N78-25067 #
NTIS/PS-78/0409/9 ..... p0451 N78-27091 #
NTIS/PS-78/0410/7 ..... p0607 N78-32073 #
NTIS/PS-78/0425/5 ..... p0458 N78-27379 #
NTIS/PS-78/0426/3 ..... p0459 N78-27380 #
NTIS/PS-78/0447/9 ..... p0503 N78-29114 #
NTIS/PS-78/0548/4 ..... p0617 N78-32604 #
NTIS/PS-78/0598/9 ..... p0609 N78-32085 #
NTIS/PS-78/0686/2 ..... p0634 N78-33634 #
NTIS/PS-78/0694/6 ..... p0624 N78-33066 #
NTIS/PS-78/0707/6 ..... p0633 N78-33599 #
NTIS/PS-78/0708/4 ..... p0634 N78-33600 #
NTIS/PS-78/0713/4 ..... p0636 N78-33918 #
NTIS/PS-78/0807/4 ..... p0634 N78-33639 #
NTIS/PS-78/0809/0 ..... p0630 N78-33122 #
NTIS/PS-78/0810/8 ..... p0632 N78-33278 #

NTISUB/C/104-010 ..... p0257 N78-19087 #
NTISUB/C/104-011 ..... p0256 N78-19086 #
NTISUB/D/104-001 ..... p0451 N78-27095 #

NTSB-AAR-77-10 ..... p0257 N78-19087 #
NTSB-AAR-77-11 ..... p0256 N78-19086 #
NTSB-AAR-78-1 ..... p0451 N78-27095 #
NTSB-AAR-78-3 ..... p0314 N78-21064 #

NTSB-AAS-78-1 ..... p0314 N78-21063 #

NTSB-ARC-78-1 ..... p0624 N78-33065 #

NTSB-ARG-78-1 ..... p0624 N78-33064 #

NWSC/CP/RDTR-61 ..... p0038 N78-11055 #

OEBL-OLAA-77-5 ..... p0151 N78-15053 #

ONERA-NT-1977-5 ..... p0093 N78-13025 #

ONERA-P-1977-1 ..... p0556 N78-30909 #

ONERA-TP-1976 ..... p0398 N78-24142*#
ONERA-TP-1977-135 ..... p0615 N78-32384*#

ONERA, TP NO. 1977-100 ..... p0191 A78-24460 #
ONERA, TP NO. 1977-101 ..... p0192 A78-24461 #
ONERA, TP NO. 1977-113 ..... p0192 A78-24463 #
ONERA, TP NO. 1977-136 ..... p0192 A78-24468 #
ONERA, TP NO. 1977-147 ..... p0003 A78-12034
ONERA, TP NO. 1977-156 ..... p0057 A78-15021
ONERA, TP NO. 1977-157 ..... p0075 A78-16619 #
ONERA, TP NO. 1977-161 ..... p0075 A78-16618 #
ONERA, TP NO. 1977-170 ..... p0108 A78-17662
ONERA, TP NO. 1977-172 ..... p0130 A78-20145
ONERA, TP NO. 1977-176 ..... p0419 A78-41420
ONERA, TP NO. 1978-7 ..... p0386 A78-39582 #
ONERA, TP NO. 1978-16 ..... p0294 A78-32328 #
ONERA, TP NO. 1978-22 ..... p0386 A78-39579 #
ONERA, TP NO. 1978-25 ..... p0386 A78-39580 #
ONERA, TP NO. 1978-32 ..... p0291 A78-32037 #
ONERA, TP NO. 1978-40 ..... p0479 A78-45277 #
ONERA, TP NO. 1978-42 ..... p0479 A78-45282
ONERA, TP NO. 1978-44 ..... p0342 A78-35894
ONERA, TP NO. 1978-52 ..... p0479 A78-45280 #
ONERA, TP NO. 1978-53 ..... p0380 A78-38696 #
ONERA, TP NO. 1978-55 ..... p0380 A78-38698 #
ONERA, TP NO. 1978-65 ..... p0383 A78-38892
ONERA, TP NO. 1978-67 ..... p0477 A78-45226 #
ONERA, TP NO. 1978-74 ..... p0479 A78-45276 #
ONERA, TP NO. 1978-93 ..... p0507 A78-46915
ONERA, TP NO. 1978-102 ..... p0508 A78-47346 #
ONERA, TP NO. 1978-103 ..... p0508 A78-47347 #
ONERA, TP NO. 1978-104 ..... p0508 A78-47348 #
ONERA, TP NO. 1978-105 ..... p0508 A78-47349 #

ONR-CR-212-225-3 ..... p0205 N78-17028 #
ONR-CR-213-142-1F ..... p0024 N78-10066 #
ONR-CR-215-230-3F ..... p0253 N78-19061 #
ONR-CR-215-233-3 ..... p0148 N78-15015 #
ONR-CR-215-237-2 ..... p0030 N78-10114 #
ONR-CR-215-241-1 ..... p0033 N78-11011 #
ONR-CR-215-246-1 ..... p0034 N78-11013 #
ONR-CR-215-248-1AR-1 ..... p0363 N78-23103 #

OTR-77-125 ..... p0094 N78-13035 #

OTSD-77-609-9-1 ..... p0154 N78-15712 #
OTSD-77-609-9-2 ..... p0154 N78-15713 #

OJEL-1188/77 ..... p0100 N78-13085 #

P-1275-VOL-1 ..... p0400 N78-24156 #
P-1280 ..... p0398 N78-24133 #

P-1292-VOL-1 ..... p0550 N78-30119 #
P-1292-VOL-2 ..... p0491 N78-28093 #
P-5994 ..... p0487 N78-28051 #

PAPER-76-170 ..... p0364 N78-23106*#
PAPER-77-026 ..... p0604 N78-32052*#
PAPER-77-027 ..... p0605 N78-32054*#
PAPER-77-073 ..... p0614 N78-32264*#

PB-268690/5 ..... p0032 N78-10624 #
PB-270864/2 ..... p0102 N78-13634 #
PB-270898/0 ..... p0099 N78-13069 #
PB-270944/2 ..... p0094 N78-13035 #
PB-271249/5 ..... p0091 N78-12552 #
PB-274578/4 ..... p0240 N78-18036 #
PB-274585/9 ..... p0240 N78-18037 #
PB-274590/9 ..... p0240 N78-18038 #
PB-275067/7 ..... p0250 N78-18595 #
PB-275090/9 ..... p0239 N78-18024*#
PB-276123/7 ..... p0318 N78-21103 #
PB-276508/9 ..... p0353 N78-22110 #
PB-277074/1 ..... p0364 N78-23214 #
PB-277351/3 ..... p0363 N78-23099 #
PB-277397/6 ..... p0440 N78-26139 #
PB-277401/6 ..... p0440 N78-26140 #
PB-277518/7 ..... p0356 N78-22551 #
PB-277674 ..... p0395 N78-24099 #
PB-277982/5 ..... p0454 N78-27119 #
PB-278815/6 ..... p0453 N78-27116 #
PB-278857/8 ..... p0451 N78-27096 #
PB-279970/8 ..... p0557 N78-31007 #
PB-280304/7 ..... p0567 N78-31946 #
PB-281148/7 ..... p0617 N78-32620 #
PB-281329/3 ..... p0624 N78-33065 #
PB-281330/1 ..... p0624 N78-33064 #
PB-283425/7 ..... p0635 N78-33692 #

PDA-TR-1031-90-58 ..... p0630 N78-33128 #

PDR-698-8 ..... p0611 N78-32098*#

PMC-77-2 ..... p0413 N78-25970 #

POLY-M/AE-77-17 ..... p0437 N78-26102*#
POLY-M/AE-78-17 ..... p0405 N78-25056*#

POR-3702 ..... p0325 N78-21402 #

PR-2 ..... p0316 N78-21092*#
PR-4 ..... p0237 N78-18005 #

PROJ-REPT-170 ..... p0356 N78-22858*#

PSAD-78-18 ..... p0440 N78-26139 #
PSAD-78-27 ..... p0453 N78-27116 #
PSAD-78-36 ..... p0567 N78-31946 #
PSAD-78-61 ..... p0440 N78-26140 #

PSU/TURBO-R78-1 ..... p0235 N78-17995*#

PTPT-78-8 ..... p0459 N78-27432 #

PUBL-72-758 ..... p0616 N78-32427*#
PUBL-1319-01-4-1775 ..... p0632 N78-33313 #

PWA-FR-8499-VOL-1 ..... p0086 N78-12081*#
PWA-FR-8499-VOL-2 ..... p0086 N78-12082*#
PWA-FR-8615 ..... p0402 N78-24556 #
PWA-FR-9511 ..... p0614 N78-32235 #

PWA-5501 ..... p0621 N78-32836*#
PWA-5506 ..... p0313 N78-21058*#
PWA-5512-17 ..... p0551 N79-30121*#
PWA-5512-24 ..... p0501 N78-29105*#
PWA-5516 ..... p0235 N78-17991*#
PWA-5527 ..... p0087 N78-12087 #
PWA-5540 ..... p0150 N78-15041*#
PWA-5543 ..... p0097 N78-13059*#
PWA-5544-13 ..... p0455 N78-27129*#
PWA-5547-4 ..... p0038 N78-11062*#
PWA-5548-9 ..... p0616 N78-32433*#
PWA-5549-8 ..... p0351 N78-22096*#
PWA-5551 ..... p0087 N78-12088 #
PWA-5554-3 ..... p0209 N78-17064*#
PWA-5554-4 ..... p0209 N78-17065*#
PWA-5554-5 ..... p0209 N78-17066*#
PWA-5590 ..... p0198 N78-16054*#
PWA-5616 ..... p0610 N78-32096*#

QMC-EP-1019 ..... p0545 N78-30066 #

QR-5 ..... p0406 N78-25071*#
QR-6 ..... p0608 N78-32075*#

QTS-23 ..... p0206 N78-17036 #

QUAD-CALC-ELETT-21 ..... p0395 N78-24111 #

R-1042 ..... p0083 N78-12062 #
R-1077 ..... p0309 N78-20141*#
R-1087 ..... p0244 N78-18065 #
R-1393 ..... p0625 N78-33085*#
R-1396-1-VOL-1 ..... p0396 N78-24118 #
R-1396-2-VOL-2 ..... p0396 N78-24119 #
R-2103-AF ..... p0308 N78-20135 #
R-2194-AF ..... p0198 N78-16048 #

RADC-TR-77-216 ..... p0086 N78-12083*#
RADC-TR-77-290-PT-1 ..... p0085 N78-12077 #
RADC-TR-77-290-PT-2 ..... p0086 N78-12078 #
RADC-TR-77-392 ..... p0360 N78-23075 #

RAE-LIB-TRANS-1903 ..... p0139 N78-14020 #
RAE-LIB-TRANS-1911 ..... p0257 N78-19095 #
RAE-LIB-TRANS-1912 ..... p0140 N78-14032 #
RAE-LIB-TRANS-1920 ..... p0145 N78-14408 #
RAE-LIB-TRANS-1921 ..... p0145 N78-14409 #
RAE-LIB-TRANS-1923 ..... p0504 N78-29452 #
RAE-LIB-TRANS-1934 ..... p0349 N78-22077 #
RAE-LIB-TRANS-1939 ..... p0356 N78-22388 #
RAE-LIB-TRANS-1942 ..... p0439 N78-26134 #
RAE-LIB-TRANS-1944 ..... p0210 N78-17071 #
RAE-LIB-TRANS-1948 ..... p0560 N78-31087 #

RAE-TM-AERO-1709 ..... p0148 N78-15017 #
RAE-TM-AERO-1710 ..... p0152 N78-15057 #

RAE-TR-71177 ..... p0359 N78-23068 #
RAE-TR-75055 ..... p0553 N78-30143 #
RAE-TR-75131 ..... p0143 N78-14158 #
RAE-TR-76007 ..... p0363 N78-23104 #
RAE-TR-76018 ..... p0100 N78-13084 #
RAE-TR-76029 ..... p0141 N78-14042 #
RAE-TR-76039 ..... p0548 N78-30098 #
RAE-TR-76059 ..... p0359 N78-23067 #
RAE-TR-76079 ..... p0093 N78-13024 #
RAE-TR-76117 ..... p0361 N78-23086 #
RAE-TR-77040 ..... p0150 N78-15035 #
RAE-TR-77073 ..... p0154 N78-15525 #
RAE-TR-77077 ..... p0548 N78-30097 #

RAND/R-2243-AF ..... p0562 N78-31100 #

RCA-EASD-TP-2146 ..... p0314 N78-21068 #

RDA-TR-140801-008 ..... p0248 N78-18272 #

RDR-1817-22 ..... p0141 N78-14047*#

RE-543 ..... p0033 N78-11011 #
RE-548 ..... p0205 N78-17025 #

REPT-1 ..... p0089 N78-12106*#
REPT-1 ..... p0251 N78-18873*#
REPT-2 ..... p0311 N78-20919*#
REPT-2-37100/7R-3442 ..... p0453 N78-27118 #
REPT-2-53300/7R-5977 ..... p0137 N78-14000 #
REPT-2-53400/7R-3428 ..... p0100 N78-13186 #
REPT-12AEI-200-1060B ..... p0349 N78-22078 #
REPT-77-1 ..... p0399 N78-24149 #
REPT-77-66N-107 ..... p0546 N78-30078 #
REPT-77-0043 ..... p0249 N78-18321 #
REPT-78-20 ..... p0635 N78-33677 #
REPT-78-66C-116 ..... p0452 N78-27106 #
REPT-791-40-13-01 ..... p0623 N78-33060*#
REPT-1099-1 ..... p0266 N78-19326*#
REPT-1099-1-VOL-3 ..... p0410 N78-25235*#
REPT-1205 ..... p0323 N78-21161*#
REPT-1266-R-0007 ..... p0249 N78-18319 #
REPT-1326-01-3-1758 ..... p0547 N78-30080 #
REPT-1326-21-01-1648-VOL-1 ..... p0615 N78-32330 #
REPT-1339-01-1-1723 ..... p0365 N78-23285 #
REPT-1343-01-1-1753 ..... p0566 N78-31134 #
REPT-1600 ..... p0366 N78-23345 #
REPT-1701-01-1-1728 ..... p0404 N78-25050 #
REPT-1708-01-1-1762 ..... p0561 N78-31093 #
REPT-1928-01-1-1704 ..... p0547 N78-30079 #

REPT-1942-01-1-1676 ..... p0314 N78-21066 #
REPT-2558 ..... p0102 N78-13851*#
REPT-3496 ..... p0197 N78-16044*#
REPT-3563 ..... p0030 N78-10116*#
REPT-7050-DG-KK-78-FR-1-DOD ..... p0612 N78-32103 #
REPT-7467-928003 ..... p0458 N78-27295 #
REPT-7681 ..... p0043 N78-11122 #

RP-2978-FR-76-4(0) ..... p0096 N78-13047 #

RI/LAAD-NA-77-217 ..... p0153 N78-15239 #

RM-653 ..... p0563 N78-31112 #

RP-552 ..... p0094 N78-13033 #
RP-582 ..... p0623 N78-33052 #

RTI-1464-00-00F ..... p0398 N78-24132*#
RTI-4378-1152-F ..... p0206 N78-17037*#

R75AEG458 ..... p0098 N78-13066 #
R76AEG484-VOL-2 ..... p0627 N78-33103*#
R77-911739-17 ..... p0311 N78-20920*#
R77AEG187 ..... p0028 N78-10100 #
R77AEG188-SUPPL ..... p0031 N78-10119 #
R77AEG593 ..... p0097 N78-13057*#
R77AEG635 ..... p0097 N78-13058*#
R78-1-VOL-2 ..... p0413 N78-25986*#
R78-1-VOL-3 ..... p0413 N78-25987*#
R78-912839-14 ..... p0413 N78-25985*#
R78AEG017 ..... p0564 N78-31115 #
R78AEG510 ..... p0563 N78-31108*#

SAC/LGME-ER-P-206 ..... p0199 N78-16058 #

SAE AIR 944A p0472 A78-44693
SAE AIR 1266 ..... p0472 A78-44696
SAE AIR 1423 ..... p0472 A78-44699
SAE AIR 1425 ..... p0472 A78-44700
SAE AIR 1494 ..... p0472 A78-44701
SAE AIR 1509 ..... p0472 A78-44703
SAE AIR 1537 ..... p0472 A78-44705
SAE ARP 492B p0471 A78-44685
SAE ARP 767A p0471 A78-44687
SAE ARP 1308A p0471 A78-44688
SAE ARP 1323 ..... p0471 A78-44689
SAE ARP 1395 ..... p0471 A78-44691
SAE ARP 1409 ..... p0472 A78-44692
SAE AS 269G p0471 A78-44680
SAE AS 1055B p0471 A78-44681
SAE AS 1516 ..... p0471 A78-44682
SAE AS 8007 ..... p0471 A78-44683
SAE AS 8017 ..... p0471 A78-44684
SAE PAPER 770580 ..... p0060 A78-15387
SAE PAPER 770581 ..... p0060 A78-15386
SAE PAPER 770583 ..... p0059 A78-15385
SAE PAPER 770950 ..... p0178 A78-23801
SAE PAPER 770951 ..... p0179 A78-23802
SAE PAPER 770952 ..... p0179 A78-23803
SAE PAPER 770953 ..... p0179 A78-23804*
SAE PAPER 770954 ..... p0179 A78-23805
SAE PAPER 770970 ..... p0179 A78-23815
SAE PAPER 770971 ..... p0179 A78-23816
SAE PAPER 770974 ..... p0179 A78-23818
SAE PAPER 770975 ..... p0179 A78-23819
SAE PAPER 770976 ..... p0179 A78-23820
SAE PAPER 770980 ..... p0179 A78-23821
SAE PAPER 770982 ..... p0180 A78-23822
SAE PAPER 770984 ..... p0180 A78-23823*
SAE PAPER 770985 ..... p0180 A78-23824
SAE PAPER 770988 ..... p0180 A78-23825
SAE PAPER 770989 ..... p0180 A78-23826
SAE PAPER 770991 ..... p0180 A78-23827
SAE PAPER 770992 ..... p0180 A78-23828
SAE PAPER 770993 ..... p0180 A78-23829
SAE PAPER 770994 ..... p0180 A78-23830
SAE PAPER 770995 ..... p0181 A78-23831
SAE PAPER 770998 ..... p0181 A78-23833
SAE PAPER 770999 ..... p0181 A78-23834
SAE PAPER 771001 ..... p0181 A78-23835
SAE PAPER 771002 ..... p0181 A78-23836
SAE PAPER 771003 ..... p0181 A78-23837
SAE PAPER 771004 ..... p0181 A78-23838
SAE PAPER 771007 ..... p0181 A78-23839
SAE PAPER 771008 ..... p0181 A78-23840*
SAE PAPER 771009 ..... p0182 A78-23841
SAE PAPER 771010 ..... p0182 A78-23842
SAE PAPER 771011 ..... p0182 A78-23843*
SAE PAPER 780017 ..... p0331 A78-33360
SAE PAPER 780020 ..... p0331 A78-33361*

SAI-78-008-WH ..... p0503 N78-29188 #

SAM-TR-75-340 ..... p0098 N78-13065 #
SAM-TR-77-19 ..... p0150 N78-15034 #
SAM-TR-77-32 ..... p0490 N78-28084 #

SAMSO-TR-77-200 ..... p0153 N78-15368 #
SAMSO-TR-77-218 ..... p0254 N78-19064 #

SAND-77-0225 ..... p0093 N78-13022 #
SAND-77-1309C ..... p0630 N78-33121 #
SAND-77-1773C ..... p0457 N78-27145 #
SAND-77-8010 ..... p0082 N78-12049 #
SAND-78-0069 ..... p0493 N78-28349 #
SAND-78-0244C ..... p0608 N78-32078 #
SAND-78-8212 ..... p0562 N78-31099 #

SC5079.5FR ..... p0237 N78-18008 #

SEMCOR-SK-JJK-75-125-1 ..... p0090 N78-12299 #

SER-50798 ..... p0210 N78-17072 #
SER-50959 ..... p0407 N78-25080*#
SER-50985 ..... p0022 N78-10051 #

SKF-AL77T021 ..... p0459 N78-27429*#

SMRP-BP-145 ..... p0239 N78-18024*#

SQUID-PU-R1-78 ..... p0499 N78-29088 #

SR-4 ..... p0406 N78-25078*#

SRD-77-133 ..... p0030 N78-10115*#
SRD-78-063 ..... p0615 N78-32391 #

SSI-TR-77-1 ..... p0363 N78-23103 #

STI-TR-1063-2 ..... p0612 N78-32106*#
STI-TR-1063-3 ..... p0504 N78-29699*#

STI-1095-1 ..... p0396 N78-24117*#

SU-DAAR-504 ..... p0019 N78-10017*#

SU-DAAR-508 ..... p0502 N78-29110*#

TAE-334-PT-1 ..... p0616 N78-32462 #

TASC-TR-612-2 ..... p0030 N78-10114 #
TASC-TR-1019-2 ..... p0623 N78-33055 #

TCRL-10 ..... p0564 N78-31118 #

TI-556 ..... p0195 N78-16024 #

TM-56 ..... p0303 N78-20100*#
TM-60 ..... p0558 N78-31068*#
TM-76-260 ..... p0148 N78-15012 #
TM-66502 ..... p0345 N78-22020*#

TOP-1-3-5 ..... p0408 N78-25086 #
TOP-1-3-504 ..... p0610 N78-32093 #
TOP-1-3-505 ..... p0202 N78-16376 #
TOP-1-3-505 ..... p0610 N78-32093 #
TOP-2-2-601 ..... p0090 N78-12335 #
TOP-7-2-511 ..... p0500 N78-29091 #
TOP-7-3-500 ..... p0408 N78-25086 #
TOP-7-3-500 ..... p0610 N78-32093 #
TOP-7-3-503 ..... p0202 N78-16376 #
TOP-7-3-522 ..... p0626 N78-33094 #

TR-S-77-8 ..... p0099 N78-13079 #

TR-74-T8 ..... p0197 N78-16046*#
TR-080 ..... p0633 N78-33405*#
TR-200 ..... p0498 N78-29069 #
TR-0078(3724-01)-2 ..... p0153 N78-15368 #
TR-0078(3940-02)-1 ..... p0254 N78-19064 #
TR-1084-1 ..... p0024 N78-10061*#
TR-1092-1 ..... p0348 N78-22071*#
TR-1097-1 ..... p0030 N78-10117*#
TR-7615 ..... p0558 N78-31048 #

TRW-ER-7887-F ..... p0355 N78-22165 #

TRW-ER-7930 ..... p0027 N78-10092*#

TSARCOM-TR-78-4 ..... p0626 N78-33091 #

TSARCOM-77-2 ..... p0085 N78-12072 #

TSC-FAA-76-23 ..... p0196 N78-16038 #
TSC-FAA-76-26 ..... p0196 N78-16037 #
TSC-FAA-77-4 ..... p0195 N78-16025 #
TSC-FAA-77-6 ..... p0195 N78-16028 #
TSC-FAA-77-11 ..... p0198 N78-16050 #
TSC-FAA-77-16 ..... p0201 N78-16245 #

TT-7705 ..... p0556 N78-30910 #
TT-7706 ..... p0557 N78-30911 #

TTCSI-CLT-3 ..... p0633 N78-33413 #

TUBS/SFB58/M4 ..... p0304 N78-20103 #
TUBS/SFB58/62 ..... p0359 N78-23073 #

T6-6145 ..... p0252 N78-19049*#

UCB-ITS-RR-77-6 ..... p0451 N78-27094*#

UCRL-50042-77 ..... p0617 N78-32601 #
UCRL-80117 ..... p0553 N78-30182 #

UILU-ENG-78-0505 ..... p0622 N78-33048*#

UMICH-012881 ..... p0324 N78-21326*#

UO-LCCM-LAC-77-017 ..... p0451 N78-27096 #

US-PATENT-APPL-SN-581750 ..... p0208 N78-17055*
US-PATENT-APPL-SN-581751 ..... p0032 N78-10468*
US-PATENT-APPL-SN-583055 ..... p0244 N78-18067*
US-PATENT-APPL-SN-623536 ..... p0246 N78-18083*
US-PATENT-APPL-SN-628221 ..... p0244 N78-18066*
US-PATENT-APPL-SN-668971 ..... p0627 N78-33101*
US-PATENT-APPL-SN-672210 ..... p0031 N78-10224*
US-PATENT-APPL-SN-672222 ..... p0408 N78-25090*
US-PATENT-APPL-SN-695513 ..... p0408 N78-25089*
US-PATENT-APPL-SN-710036 ..... p0617 N78-32539*
US-PATENT-APPL-SN-718244 ..... p0609 N78-32086*
US-PATENT-APPL-SN-730045 ..... p0402 N78-24391*
US-PATENT-APPL-SN-739915 ..... p0402 N78-24544*
US-PATENT-APPL-SN-740457 ..... p0616 N78-32395*
US-PATENT-APPL-SN-788705 ..... p0402 N78-24515*
US-PATENT-APPL-SN-858762 ..... p0210 N78-17070*#
US-PATENT-APPL-SN-861392 ..... p0271 N78-19898*#
US-PATENT-APPL-SN-878540 ..... p0241 N78-18045*#
US-PATENT-APPL-SN-880725 ..... p0253 N78-19055*#
US-PATENT-APPL-SN-885065 ..... p0354 N78-22115*#
US-PATENT-APPL-SN-885066 ..... p0265 N78-19166*#
US-PATENT-APPL-SN-910708 ..... p0408 N78-25088*#
US-PATENT-APPL-SN-916654 ..... p0454 N78-27122*#
US-PATENT-APPL-SN-920878 ..... p0457 N78-27184*#
US-PATENT-APPL-SN-931090 ..... p0562 N78-31103*#
US-PATENT-APPL-SN-934576 ..... p0630 N78-33123*#
US-PATENT-APPL-SN-943087 ..... p0613 N78-32168*#

US-PATENT-CLASS-29-23.5 ..... p0402 N78-24544*
US-PATENT-CLASS-29-156.8R p0402 N78-24544*
US-PATENT-CLASS-29-244 ..... p0402 N78-24544*
US-PATENT-CLASS-29-252 ..... p0402 N78-24544*
US-PATENT-CLASS-29-463 ..... p0627 N78-33101*
US-PATENT-CLASS-33-366 ..... p0616 N78-32395*
US-PATENT-CLASS-35-12N p0246 N78-18083*
US-PATENT-CLASS-60-39.07 ..... p0617 N78-32539*
US-PATENT-CLASS-60-39.14 ..... p0617 N78-32539*
US-PATENT-CLASS-60-39.31 ..... p0244 N78-18066*
US-PATENT-CLASS-60-39.33 ..... p0617 N78-32539*
US-PATENT-CLASS-60-39.51R p0031 N78-10224*
US-PATENT-CLASS-60-39.52 ..... p0408 N78-25089*
US-PATENT-CLASS-60-204 ..... p0208 N78-17055*
US-PATENT-CLASS-60-204 ..... p0244 N78-18067*
US-PATENT-CLASS-60-226R p0208 N78-17055*
US-PATENT-CLASS-60-226R p0244 N78-18066*
US-PATENT-CLASS-60-226R p0408 N78-25089*
US-PATENT-CLASS-60-262 ..... p0244 N78-18067*
US-PATENT-CLASS-60-271 ..... p0208 N78-17055*
US-PATENT-CLASS-73-456 ..... p0402 N78-24515*
US-PATENT-CLASS-73-756 ..... p0402 N78-24515*
US-PATENT-CLASS-74-572 ..... p0627 N78-33101*
US-PATENT-CLASS-98-1.5 ..... p0617 N78-32539*
US-PATENT-CLASS-165-105 ..... p0031 N78-10224*
US-PATENT-CLASS-244-45A p0609 N78-32086*
US-PATENT-CLASS-244-46 ..... p0609 N78-32086*
US-PATENT-CLASS-244-53A p0244 N78-18066*
US-PATENT-CLASS-244-54 ..... p0244 N78-18066*
US-PATENT-CLASS-244-218 ..... p0609 N78-32086*
US-PATENT-CLASS-277-25 ..... p0408 N78-25090*
US-PATENT-CLASS-277-134 ..... p0408 N78-25090*
US-PATENT-CLASS-307-151 ..... p0402 N78-24391*
US-PATENT-CLASS-343-700MS p0402 N78-24391*
US-PATENT-CLASS-358-104 ..... p0246 N78-18083*
US-PATENT-CLASS-361-395 ..... p0402 N78-24391*
US-PATENT-CLASS-416-61 ..... p0402 N78-24515*
US-PATENT-CLASS-416-135 ..... p0032 N78-10468*
US-PATENT-CLASS-416-141 ..... p0032 N78-10468*
US-PATENT-CLASS-416-144 ..... p0402 N78-24515*
US-PATENT-CLASS-416-214A p0627 N78-33101*
US-PATENT-CLASS-416-220R p0032 N78-10468*
US-PATENT-CLASS-416-244A p0627 N78-33101*
US-PATENT-CLASS-416-248 ..... p0032 N78-10468*
US-PATENT-CLASS-417-88 ..... p0617 N78-32539*
US-PATENT-CLASS-431-158 ..... p0031 N78-10224*
US-PATENT-CLASS-431-352 ..... p0031 N78-10224*

US-PATENT-4,047,840 ..... p0032 N78-10468*
US-PATENT-4,052,144 ..... p0031 N78-10224*
US-PATENT-4,055,004 ..... p0246 N78-18083*
US-PATENT-4,055,041 ..... p0244 N78-18066*
US-PATENT-4,068,469 ..... p0208 N78-17055*
US-PATENT-4,069,661 ..... p0244 N78-18067*
US-PATENT-4,078,290 ..... p0402 N78-24544*
US-PATENT-4,079,268 ..... p0402 N78-24391*
US-PATENT-4,082,001 ..... p0402 N78-24515*
US-PATENT-4,083,181 ..... p0408 N78-25089*
US-PATENT-4,084,825 ..... p0408 N78-25090*
US-PATENT-4,091,613 ..... p0617 N78-32539*
US-PATENT-4,093,156 ..... p0609 N78-32086*
US-PATENT-4,094,073 ..... p0616 N78-32395*
US-PATENT-4,097,194 ..... p0627 N78-33101*

USAAEFA-75-04 ..... p0561 N78-31091 #
USAAEFA-75-17-1 ..... p0097 N78-13055 #
USAAEFA-75-17-2 ..... p0150 N78-15037 #
USAAEFA-75-17-3 ..... p0150 N78-15036 #
USAAEFA-75-19-1 ..... p0025 N78-10067 #
USAAEFA-76-03 ..... p0149 N78-15029 #
USAAEFA-76-13 ..... p0242 N78-18053 #
USAAEFA-77-05 ..... p0149 N78-15033 #

USAAMRDL-TR-76-16 ..... p0317 N78-21098 #
USAAMRDL-TR-76-18 ..... p0022 N78-10052 #
USAAMRDL-TR-76-30 ..... p0029 N78-10109 #
USAAMRDL-TR-77-6 ..... p0096 N78-13045 #
USAAMRDL-TR-77-7 ..... p0022 N78-10051 #
USAAMRDL-TR-77-12 ..... p0042 N78-11108 #
USAAMRDL-TR-77-13 ..... p0256 N78-19084 #
USAAMRDL-TR-77-16 ..... p0403 N78-24557 #
USAAMRDL-TR-77-18 ..... p0307 N78-20124 #
USAAMRDL-TR-77-19A-VOL-1 ..... p0140 N78-14037 #
USAAMRDL-TR-77-19B ..... p0149 N78-15032 #
USAAMRDL-TR-77-20 ..... p0210 N78-17072 #
USAAMRDL-TR-77-21 ..... p0242 N78-18054 #
USAAMRDL-TR-77-22 ..... p0306 N78-20121 #
USAAMRDL-TR-77-23A ..... p0396 N78-24118 #
USAAMRDL-TR-77-23B ..... p0396 N78-24119 #
USAAMRDL-TR-77-26 ..... p0210 N78-17069 #
USAAMRDL-TR-77-27 ..... p0261 N78-19124 #
USAAMRDL-TR-77-28 ..... p0306 N78-20120 #
USAAMRDL-TR-77-30 ..... p0307 N78-20123 #
USAAMRDL-TR-77-32 ..... p0397 N78-24126 #
USAAMRDL-TR-77-33 ..... p0400 N78-24158 #
USAAMRDL-TR-77-34 ..... p0561 N78-31096 #
USAAMRDL-TR-77-35 ..... p0211 N78-17080 #
USAAMRDL-TR-77-37 ..... p0396 N78-24122 #
USAAMRDL-TR-77-38 ..... p0500 N78-29094 #
USAAMRDL-TR-77-39 ..... p0349 N78-22081 #
USAAMRDL-TR-77-40A ..... p0353 N78-22113 #
USAAMRDL-TR-77-40B-VOL-2 ..... p0323 N78-21163 #
USAAMRDL-TR-77-40C-VOL-3 ..... p0324 N78-21164 #
USAAMRDL-TR-77-41 ..... p0499 N78-29089 #
USAAMRDL-TR-77-45A-VOL-1 ..... p0352 N78-22104 #
USAAMRDL-TR-77-46 ..... p0360 N78-23082 #

USAARL-77-12 ..... p0032 N78-10609 #
USAARL-77-18 ..... p0207 N78-17046 #

USAAVRADCOM-CH47-M-78-01 ..... p0564 N78-31113 #

USAAVRADCOM-TR-78-4 ..... p0612 N78-32109 #
USAAVRADCOM-TR-78-9 ..... p0561 N78-31094 #

USAAVRADCOM-76-45 ..... p0366 N78-23438 #

USAAVS-TR-78-2 ..... p0561 N78-31092 #

USAFIFC-TR-77-3 ..... p0143 N78-14058 #
USAFIFC-TR-78-1 ..... p0361 N78-23087 #

USARTL-TN-27 ..... p0359 N78-23071 #
USARTL-TN-28 ..... p0361 N78-23083 #

USARTL-TR-77-47 ..... p0362 N78-23097 #
USARTL-TR-77-50 ..... p0439 N78-26136 #
USARTL-TR-77-51 ..... p0568 N78-31952 #
USARTL-TR-78-1A-VOL-1 ..... p0607 N78-32070 #
USARTL-TR-78-1B-VOL-2 ..... p0607 N78-32071 #
USARTL-TR-78-2A ..... p0560 N78-31089 #
USARTL-TR-78-2B ..... p0548 N78-30095 #
USARTL-TR-78-3 ..... p0609 N78-32089 #
USARTL-TR-78-4 ..... p0564 N78-31115 #
USARTL-TR-78-10 ..... p0564 N78-31119 #
USARTL-TR-78-11 ..... p0564 N78-31114 #
USARTL-TR-78-20 ..... p0626 N78-33093 #
USARTL-TR-78-22 ..... p0608 N78-32077 #

USCG-M-1-78 ..... p0239 N78-18023 #

USNA-TSPR-87 ..... p0097 N78-13052 #

USNTPS-PTM-103-REV ..... p0363 N78-23101 #

UTIAS-TN-204 ..... p0081 N78-12029 #
UTIAS-TN-207 ..... p0345 N78-22029 #
UTIAS-TN-211 ..... p0081 N78-12030 #
UTIAS-TN-216 ..... p0403 N78-24755 #
UTIAS-TN-218 ..... p0454 N78-27123 #

UTIAS-215 ..... p0246 N78-18077 #
UTIAS-221 ..... p0353 N78-22112 #

UTRC-R77-912538-4 ..... p0364 N78-23152 #

UVA/526033/MAE78/101-PT-B ..... p0300 N78-20068*#
UVA/528062/EE78/106 ..... p0609 N78-32080*#
UVA/528095/MAE78/113-PT-C ..... p0300 N78-20069*#
UVA/528095/MAE78/114-PT-D ..... p0300 N78-20070*#
UVA/528095/MAE78/115-PT-A ..... p0300 N78-20067*#
UVA/528095/MAE78/115-PT-B ..... p0300 N78-20068*#
UVA/528148/MAE78/101 ..... p0545 N78-30069*#
UVA/528156/CE78/110 ..... p0406 N78-25068*#

VS-29 ..... p0031 N78-10342 #

VTH-IR-220 ..... p0138 N78-14011 #
VTH-IR-226 ..... p0148 N78-15019 #
VTH-IR-234 ..... p0488 N78-28065 #
VTH-IR-246 ..... p0146 N78-14874 #
VTH-IR-248 ..... p0143 N78-14062 #

VTH-190 ..... p0149 N78-15022 #

VTI-128 ..... p0140 N78-14041 #

WAES-TNR-234 ..... p0502 N78-29106 #

WES-TR-S-77-12 ..... p0502 N78-29111 #

WORKING-PAPER-138-11 ..... p0138 N78-14017 #

WP-76-3011-19 ..... p0460 N78-27979 #

WQEC/C-77-297 ..... p0090 N78-12342 #

WRE-TR-1858(W) ..... p0147 N78-15005 #

W46-0273 ..... p0139 N78-14023 #

AERONAUTICAL ENGINEERING

A Continuing Bibliography

Abstracts
January—December 1978

TABLE OF CONTENTS

SP-7037 Supplement	Page
93	1
94	49
95	105
96	157
97	215
98	273
99	327
100	369
101	415
102	461
103	507
104	569

1 Report No	2 Government Accession No	3 Recipient's Catalog No
NASA SP-7037 (105)		

4 Title and Subtitle	5 Report Date
AERONAUTICAL ENGINEERING A Cumulative Index to the 1978 Issues	January 1979
	6 Performing Organization Code
7 Author(s)	8 Performing Organization Report No
	10 Work Unit No
9 Performing Organization Name and Address National Aeronautics and Space Administration Washington, D. C. 20546	11 Contract or Grant No
	13 Type of Report and Period Covered
12 Sponsoring Agency Name and Address	14 Sponsoring Agency Code

15 Supplementary Notes

16 Abstract

This bibliography is a cumulative index to the abstracts contained in NASA SP-7037 (93) through NASA SP-7037 (104) of Aeronautical Engineering: A Continuing Bibliography. NASA SP-7037 and its supplements have been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA) and the National Aeronautics and Space Administration (NASA). This cumulative index includes subject, personal author, corporate source, contract, and report number indexes.

17 Key Words (Suggested by Author(s))	18 Distribution Statement
Aerodynamics Aeronautical Engineering Aeronautics Bibliographies	Unclassified - Unlimited

19 Security Classif (of this report)	20 Security Classif (of this page)	21 No of Pages	22 Price*
Unclassified	Unclassified	698	$9.00 HC

*For sale by the National Technical Information Service, Springfield, Virginia 22161

PUBLIC COLLECTIONS OF NASA DOCUMENTS

DOMESTIC

NASA distributes its technical documents and bibliographic tools to eleven special libraries located in the organizations listed below Each library is prepared to furnish the public such services as reference assistance, interlibrary loans, photocopy service, and assistance in obtaining copies of NASA documents for retention

CALIFORNIA
University of California, Berkeley
COLORADO
University of Colorado, Boulder
DISTRICT OF COLUMBIA
Library of Congress
GEORGIA
Georgia Institute of Technology, Atlanta
ILLINOIS
The John Crerar Library, Chicago
MASSACHUSETTS
Massachusetts Institute of Technology, Cambridge
MISSOURI
Linda Hall Library, Kansas City
NEW YORK
Columbia University, New York
OKLAHOMA
University of Oklahoma, Bizzell Library
PENNSYLVANIA
Carnegie Library of Pittsburgh
WASHINGTON
University of Washington, Seattle

NASA publications (those indicated by an "*" following the accession number) are also received by the following public and free libraries

CALIFORNIA
Los Angeles Public Library
San Diego Public Library
COLORADO
Denver Public Library
CONNECTICUT
Hartford Public Library
MARYLAND
Enoch Pratt Free Library, Baltimore
MASSACHUSETTS
Boston Public Library
MICHIGAN
Detroit Public Library
MINNESOTA
Minneapolis Public Library
MISSOURI
Kansas City Public Library
St Louis Public Library
NEW JERSEY
Trenton Public Library
NEW YORK
Brooklyn Public Library
Buffalo and Erie County Public Library
Rochester Public Library
New York Public Library
OHIO
Akron Public Library
Cincinnati Public Library
Cleveland Public Library
Dayton Public Library
Toledo Public Library
TENNESSEE
Memphis Public Library
TEXAS
Dallas Public Library
Fort Worth Public Library
WASHINGTON
Seattle Public Library
WISCONSIN
Milwaukee Public Library

An extensive collection of NASA and NASA-sponsored documents and aerospace publications available to the public for reference purposes is maintained by the American Institute of Aeronautics and Astronautics, Technical Information Service, 750 Third Avenue, New York, New York 10017

EUROPEAN

An extensive collection of NASA and NASA-sponsored publications is maintained by the British Library Lending Division, Boston Spa, Wetherby, Yorkshire, England By virtue of arrangements other than with NASA, the British Library Lending Division also has available many of the non-NASA publications cited in *STAR* European requesters may purchase facsimile copy of microfiche of NASA and NASA-sponsored documents, those identified by both the symbols "#" and "*", from ESA - Information Retrieval Service, European Space Agency, 8-10 rue Mario-Nikis, 75738 Paris CEDEX 15, France

National Aeronautics and
Space Administration

Washington, D.C.
20546

Official Business
Penalty for Private Use, $300

SPECIAL FOURTH CLASS MAIL
BOOK

Postage and Fees Paid
National Aeronautics and
Space Administration
NASA-451

U.S.MAIL

NASA

POSTMASTER: If Undeliverable (Section 158 Postal Manual) Do Not Return

NASA CONTINUING BIBLIOGRAPHY SERIES

NUMBER	TITLE	FREQUENCY
NASA SP–7011	AEROSPACE MEDICINE AND BIOLOGY Aviation medicine, space medicine, and space biology	Monthly
NASA SP–7037	AERONAUTICAL ENGINEERING Engineering, design, and operation of aircraft and aircraft components	Monthly
NASA SP–7039	NASA PATENT ABSTRACTS BIBLIOGRAPHY NASA patents and applications for patent	Semiannually
NASA SP–7041	EARTH RESOURCES Remote sensing of earth resources by aircraft and spacecraft	Quarterly
NASA SP–7043	ENERGY Energy sources, solar energy, energy conversion, transport, and storage	Quarterly
NASA SP–7500	MANAGEMENT Program, contract, and personnel management, and management techniques	Annually

Details on the availability of these publications may be obtained from:

SCIENTIFIC AND TECHNICAL INFORMATION OFFICE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Washington, D.C. 20546