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., p 0559 A82-44940. To assist the user in binding Supplements SP-7037(145) through SP-7037(156), a title page is included in the back of this Cumulative Index.
A CUMULATIVE INDEX
    TO
A CONTINUING BIBLIOGRAPHY ON
AERONAUTICAL ENGINEERING

This Cumulative Index supersedes the indexes contained in supplements [SP-7037(145) through SP-7037(156)] published by NASA during 1982.
This index is available as NTISUB/141/093 from the National Technical Information Service (NTIS), Springfield, Virginia 22161 at the price code of $10.00 domestic; $20.00 foreign.
INTRODUCTION

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7037(145) through NASA SP-7037(156) 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 (N82-10000 series).
2. AIAA entries by their IAA accession numbers (A82-10000 series)

HOW THIS CUMULATIVE INDEX IS ORGANIZED

This Cumulative Index includes a subject, personal author, and corporate source 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 that 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 can 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 translation 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 559 will be found in Supplement 156.

AVAILABILITY OF DOCUMENTS

Information concerning the availability of documents announced in Aeronautical Engineering supplements is found in the Introduction to the most currently issued supplement.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Index/Number</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Index</td>
<td>A-1</td>
</tr>
<tr>
<td>Personal Author Index</td>
<td>B-1</td>
</tr>
<tr>
<td>Corporate Source Index</td>
<td>C-1</td>
</tr>
<tr>
<td>Contract Number Index</td>
<td>D-1</td>
</tr>
<tr>
<td>Report/Accession Number Index</td>
<td>E-1</td>
</tr>
</tbody>
</table>
### SUBJECT INDEX

**AERONAUTICAL ENGINEERING** / a continuing bibliography

**1982 Cumulative Index**

#### Typical Subject Index Listing

<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>TITLE</th>
<th>REPORT NUMBER</th>
<th>PAGE NUMBER</th>
<th>NASA ACCESSION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABSORBERS (EQUIPMENT)</strong></td>
<td>Raven aircraft filter-absorber --- agricultural aircraft</td>
<td>(AD-A09862)</td>
<td>P0099 A82-13139</td>
<td></td>
</tr>
<tr>
<td><strong>A-6 AIRCRAFT</strong></td>
<td>Harpoon missile captive-carry dynamic environments on the A-6 aircraft</td>
<td>P0583 A82-47072</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A-7 AIRCRAFT</strong></td>
<td>Direct digital design method for reconfigurable multivariable control laws for the A-7 Digitac II aircraft</td>
<td>P0074 A82-16828</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Navy ship evaluation of the A-7 airplane configured with automatic maneuvering flaps</td>
<td>P0076 A82-16933</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A-7 transonic wing designs</td>
<td>P0431 A82-35562</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A comparison of theoretical and experimental pressure distributions for two advanced fighter wings</td>
<td>P0035 A82-11054</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>System safety program plan --- electromagnetic pulse testing of the A-7 aircraft</td>
<td>P0061 A82-11354</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Function specifications for the A-7 aircraft (AD-A104557)</td>
<td>P0203 A82-17173</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A-78 software module guide</td>
<td>P0260 A82-18920</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A-10 AIRCRAFT</strong></td>
<td>Performance assessment of the ACES-II ejection seat-A-10 configuration</td>
<td>P0800 A82-14980</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production weldbonding on the A-10 aircraft</td>
<td>P0327 A82-26995</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manual conversion flight control system for A-10 aircraft: Pilot performance and simulator cue effects</td>
<td>(AD-A113463)</td>
<td>P0526 A82-28302</td>
<td></td>
</tr>
<tr>
<td><strong>A-300 AIRCRAFT</strong></td>
<td>Gust load alleviation on Airbus A 300</td>
<td>P0504 A82-40808</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The effect of intake flow disturbances on ADP compressor blade high cycle fatigue in the Airbus A 300</td>
<td>P0513 A82-40993</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Active control elements on the transonic wing of the Airbus A-300 (ACTTA A). Airbus A-300 with reduced longitudinal stability (ACTTA-C) --- advanced control transonic transport aircraft (ACTTA); design considerations</td>
<td>P0026 A82-10044</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACTTA: Investigation of new piloting and flight control technologies. Volume 1: Review; active wing</td>
<td>(AD-88-05-01-TOOL-1)</td>
<td>P0369 A82-23252</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACTTA: Investigation of new piloting and flight control technologies. Volume 2: Aircraft with reduced lateral stability</td>
<td>(AD-88-05-01-TOOL-2)</td>
<td>P0370 A82-23253</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Slip indication system as a fuel saving aid in jet transport aircraft operation --- a-300 and a-310 aircraft</td>
<td>P0402 A82-25181</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ABILITIES**

Human capabilities and limitations in systems

**ABLATION**

Development and laboratory testing of a thermal erosion velocimeter for application to an erosion nose tip test facility

**ABLATIVE MATERIALS**

Fireworthiness of transport aircraft interior systems

**ABSORPTION BANDS**

Airborne absorption remote sensor: 1980 PEPS/REIGS program

**AC (CURRENT)**

Alternating current

**AC GENERATORS**

60 KVA ADP permanent magnet VSCF starter generator system - Generator system performance characteristics

**ACCELERATION**

Digital simulation of aircraft electrical generating systems by means of Spectre program

**HIGH SPEED VSCF GENERATOR DESIGN**

Computer aided design for Variable Speed

---

**JANUARY 1983**
ACCELERATION (PHYSICS)

ACCENTRATED LIFE TESTS

Constant Frequency generator
Advanced generating system technology
Models for the motor state of PSCP aircraft
Aircraft electric system development and test facilities
Advanced attack helicopter fatigue testing - Overview
Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing
Effects of defects on tension coupons undergoing an accelerated environmental spectrum
Moisture gradient considerations in environmental fatigue of CFPE

ACCELERATION (PHYSICS)

ACCIDENTAL COLLISIONS

ACCIDENTS

ACCIDENT PREVENTION

A matter of seconds - A critical account of three notable air disasters /5th Major Miller Memorial Lecture/
Why safety --- fuel conservation through aircraft safety
Accident prevention - A regulators view

ACCIDENTS

ACCIDENT PREVENTION

A proposed flight safety program for the Korean Air Force
Lightning effects on aircraft and composites.

ACCIDENTAL COLLISIONS

ACCIDENTS

ACCIDENT PREVENTION

A study of wind shear effects on aircraft operations and safety in Australia

ACCIDENTS

ACCIDENT PREVENTION

A study of air compressor hazards in underground and surface mines

ACCIDENTS

ACCIDENT PREVENTION

A convention on lightning strikes and protection advanced composite materials

ACCIDENTS

ACCIDENT PREVENTION

A flight safety program for the Korean Air Force

ACCIDENTS

ACCIDENT PREVENTION

A study of wind shear effects on aircraft operations and safety in Australia

ACCIDENTS

ACCIDENT PREVENTION

A flight safety program for the Korean Air Force
The effect of barriers on wave propagation phenomena: With application for aircraft noise shielding (NASA-CR-169128) p0530 B2-29111

ACOUSTIC CORROSION
2 CORROSION STABILITY
ACOUSTIC DUCTS
Impedance modeling of acoustic absorbing materials for aircraft engine applications p0062 B2-14043
The effect of induced sound on the flow around a rectangular body in a wind tunnel p0276 B2-26194
Mode scatterer design for fan noise suppression in two-dimensional ducts p0551 B2-21802
The Rolls Royce role in aircraft noise reduction --- jet engines, acoustic lining (PBR-90069) p0319 B2-21210
Development of an analytical technique for the optimization of jet engine and duct acoustic liners (NASA-CR-169002) p0409 B2-25256
Circularly segmented duct lines optimized for axisymmetric and standing wave sources --- reducing noise from turbofan engines galerkin method acoustic attenuation (NASA-TD-2075) p0616 B2-34190

ACOUSTIC EMISSION
Acoustic emission - An emerging technology for assessing fatigue damage in aircraft structures p0013 B2-11149
FDE of composite rotor blades during fatigue testing (NASA-TT-712) p0235 B2-29711
Acoustic emission in jet engine fan blades p0419 B2-35257
'Listening' systems to increase aircraft structural safety and reduce costs p0492 B2-39539
Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion p0584 B2-41914
In-flight acoustic emission monitoring p0548 B2-42665
Acoustic emission from free jets --- supersonic jets p0359 B2-29562

ACOUSTIC EXCITATION
Development and validation of preliminary analytical models for aircraft interior noise prediction p0444 B2-36077
Vibration of structures excited acoustically p0307 B2-20343
Acoustic noise test as part of the dynamic qualification program in aeropace p0344 B2-22162
STOL aircraft structural vibration prediction free acoustic excitation p0345 B2-22169

ACOUSTIC FATIGUE
Response of nonlinear aircraft structural panels to high intensity noise p0018 B2-12041
On the sonic fatigue life estimation of skin structures at room and elevated temperatures p0222 B2-23678

ACOUSTIC GENERATORS & SOUND GENERATORS
ACOUSTIC IMPEDANCE
Airframe absorbers - Promise and practice --- sound attenuation p0062 B2-14042
Impedance modeling of acoustic absorbing materials for aircraft engine applications p0062 B2-14043

ACOUSTIC MEASUREMENT
MT NOISE MEASUREMENT
Effects of vane/blade ratio and spacing on fan noise (AIAA PAPER 81-2033) p0008 B2-10657
Large scale model measurements of airframe noise using cross-correlation techniques
ACTIVE COITBOL

ACTIIOBETEBS

ACTIIIBE SEBIEBS

ACOUSTICS

ACOUSTIC VIBBATJOIS

ACOUSTIC VELOCItl

ACOUSTIC SIBOUflOH

ACOUSTIC SIBOLAflOl

Development of a control lav for the alleviation

NT DICKE BADIOHETEBS

NT I8FBABED SPECTBODETBBS

NT INFBABBD DBTECTOBS

NT THORIUM

NT OBAHIDH

TABSET ACQUISITION

HT PSY.CHOACOUSIICS

HI BI04COOSTICS

OF BEQOENCT. STABILITY.

U SOOHD BAVES

Estimation of the peak count of actively

Seal-active fluid inertia - A new concept in

Active control elements on the transonic wing of

Fighters - Tomorrow's terminology

Digital active control system for load alleviation

Fault isolation methodology for the L-10 11 digital

Active control of aeroelastic divergence

A simple system for helicopter

Development of a control law for the alleviation

of maneuver loads on an elastic aircraft

A method for determination of the aerelastic

behavior of aircraft with active control systems

A method for the reduction of design

loads and improvement of the maneuverability

of modern fighter aircraft

Design for active and passive flutter suppression

and gust alleviation

Interactive aircraft flight control and

aeroelastic stabilization --- forward swept wing

flight vehicles

Accelerated development and flight evaluation of

active controls concepts for subsonic transport

aircraft. Volume 1: Load alleviation/extended

span development and flight tests

The application of subsonic theoretical

aerodynamics to active controls... aircraft

controls

An electronic control for an electrohydraulic

active control landing gear for the F-4 aircraft

Control law design to meet constraints using

STANAVAC-synthesis package for active controls

ACTFA: Investigation of new piloting and flight

testbeds

A method for determining the aerelastic behavior

of aircraft with active control systems

Guidance and control/ACEE

Comparison of analytical and wind-tunnel results

for flutter and gust response of a transport

wing with active controls

The Shock and Vibration Digest, volume 14, no. 7

CF6 jet engine performance improvement: High

Comparison of analytical and wind-tunnel results

for flutter and gust response of a transport

wing with active controls

Active control technology in aircraft

Selected advanced aerodynamics and active controls

technology concepts development on a derivative

B-767

Integrated application of active controls (IAAC)
technology to an advanced subsonic transport

project. Initial ACT configuration design study

Integrated application of active controls (IAAC)
technology to an advanced subsonic transport

project. Initial act configuration design study

Integrated application of active controls (IAAC)
technology to an advanced subsonic transport

project.

Conventional baseline configuration study

ACCUKON DISKS

Rotating stall in blade rows operating in shear flow

A-9
ADHESIVES
Fatigue behavior of adhesively bonded joints
[81-02-29032]

Bonded aluminum honeycomb - aircraft flight surface primary structure application
[AIAA 82-0676]

Aeronautical applications of bonding
[81-02-551-102]

Laminar flow control SFW/08 feasibility demonstration
[NASA-CR-16584]

[82-15010]

Develop, demonstrate, and verify large area composite structural bonding with polyamide adhesives — adhesively bonding graphite-polyamide structures

[NASA-CR-165839]

Titanium surface treatments for adhesive bonding
[AD-114710]

ADJUVANTS
Additional polyamide adhesives containing various end groups
[82-29089]

ADVANCED TECHNOLOGY LABORATORY
A unique integrated flight testing facility for advanced control/display research
[AIAA PAPER 81-2490]

AERIAL PHOTOGRAPHY
AERIAL PHOTOGRAPHY
Three navigation systems and their costs of acquiring remote sensing data
[82-19779]

Weather impact on low-altitude imaging infrared sensors in Europe - an availability model
[82-10099]

Current aerial cameras
[82-15655]

A VHF imaging system with VHF radiotelemetry for area-representative strip-survey flights conducted, as part of combined forest inventories, with light aircraft carrying 70 and 35 mm cameras
[82-15748]

A field guide for scanner and photographic missions
[82-43668]

Loran-C navigation as an aid to aerial photographic operations
[82-43669]

Photointerpretation key for pane regeneration analysis using high-altitude color infrared panoramic photography

[82-30606]

AFFINE PHOTOGRAPHY
Offshore uses of the airship
[82-20553]

Studies of modern technology airships for maritime patrol applications
[82-20554]

The airship - its application and promotional activity
[82-20555]

The uses of airships in the Royal Navy
[82-20556]

A surveillance airship for the New Zealand environment
[82-20557]

Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets
[82-20558]

The utilization of aircraft in fighting forest fires - French experience
[82-27641]

Cloud top remote sensing by airborne lidar
[82-29581]

Hydrological and meteorological investigations of climate change
[82-32920]

Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases
[82-39747]

The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations

[82-15930]

Airborne gamma-ray spectrometer and magnetometer survey. Itielpak river quadrangle, Alaska, volume 2
[82-29420]

Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 1

[82-26465]

[82-33650]

[82-164450]

[82-30606]

SUBJECT INDEX

Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 2

[82-24629]

Airborne gamma-ray spectrometer and magnetometer survey. Barrow quadrangle, Alaska, volume 2

[82-25623]

Some potential novel approaches to the automatic airborne detection and identification of ground targets
[82-27396]

Geophysical flight line flying and flight path recovery utilizing the Litton LTM-76 inertial navigation system
[82-29292]

AERIAL RADAR
Design, fabrication and qualification of the T-2 composite rudder
[82-38994]

Dynamic response of a hot gas, control-surface actuator - for an aircraft rudder

[82-21219]

AEREOACOUSTICS
Helicopter rotor trailing edge noise
[AIAA PAPER 81-2001]

Design predictions for noise control in the cryogenic National Transonic Facility
[82-12025]

Workshop report for the AIAA 6th Aeroacoustics Conference

[82-16315]

Scattering of sound by a vortex ring

[82-16146]

The German-Dutch wind tunnel as aeroacoustic experimental installation

[82-17316]

Current investigations regarding noise research in the Braunschweig Center of the German Institute for Research and Experimentation in Aeronautics and astronautics

[82-17137]

High frequency sound emission from moving point multipole sources embedded in arbitrary transversely sheared mean flows

[82-26318]

On the generation of side-edge flap noise

[82-26319]

Consents on ‘Nature of inlet turbulence and strut flow disturbances and their effect on turbomachinery rotor noise’

[82-26320]

Model based study of various configurations of jet crosing a cavity - Application to the CSFR 19 wind tunnel of CPRA

[82-33627]

The prediction of helicopter rotor discrete frequency noise

[82-34053]

Helicopter model scale results of blade-vortex interaction impulsive noise as affected by blade planform

[82-40556]

Aerocoustic theory for noncompact wing-gust interaction

[82-11071]

Aerocoustic performance of an externally blown flap configuration with several flap noise suppression devices

[82-19570]

Aeracoustic performance of an externally blown flap configuration with several flap noise suppression devices

[82-16995]

On the design and test of a low noise propeller

[82-24942]

On the design and test of a low noise propeller

[82-27089]

The effect of barriers on wave propagation phenomena: with application for aircraft noise shielding

[82-169128]

Some comments on the prediction of forward flight effects on jet noise

[82-29111]

Noise measurement in wind tunnels, workshop summary

[82-29118]

AERODYNAMIC AXES
0 AERODYNAMIC BALANCE

A-6
AERODYNAMIC BALANCE
Development of new lifting parachute designs with increased trim angle
(AIAA PAPER 81-1921) p0006 A82-10407
Application of the concept of dynamic trim control and nonlinear system inverses to automatic control of a vertical attitude takeoff and landing aircraft
(AIAA 81-2238) p0007 A82-13366
Determination of the trimmed drag of an aircraft
(AIAA PAPER 81-2623) p0007 A82-13402
Evaluation and wind tunnel tests of the 8,000 lb (normal-force) pitch/pitch and roll dynamic stability balance system for measuring direct, cross, and cross-coupling derivatives
(AD-A105122) p0005 A82-12004
Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference
(AIAA PAPER 81-13090)
Experimental trim drag values for conventional and supercritical wings
(NASA CR-168500) p0198 A82-17126
A general purpose program for rotor blade dynamics
(AIAA PAPER 81-18511)
The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives
(AD-A1115) p0038 A82-29333
AERODYNAMIC DRAG
U PLUNTER
U AERODYNAMIC CENTER
U AERODYNAMIC CHARACTERISTICS
WT AERODYNAMIC BALANCE
WT AERODYNAMIC CHARACTERISTICS
WT AERODYNAMIC DRAG
WT AERODYNAMIC STABILITY
WT INTERFERENCE DRAG
WT INTERFERENCE LIFT
WT JET LIFT
WT LIFT
WT MOTOR LIFT
WT STATIC AERODYNAMIC CHARACTERISTICS
WT SUPERSONIC DRAG
Experimental study of subsonic and transonic flows past a wing
(AIAA PAPER 80-1936)
Aerodynamics and performance of cruciform parachute canopies
(AIAA PAPER 81-1919)
Development of new lifting parachute designs with increased trim angle
(AIAA PAPER 81-1921)
Propran installation aerodynamics of a supercritical swept wing transport configuration
(AIAA 81-1563)
Calculation of aerodynamic characteristics of a jet-flapped airplane
(AIAA PAPER 81-11959)
Divergence of a sweptforward wing
(AIAA PAPER 81-1365)
HIMAT aerodynamic design and flight test experience
(AIAA PAPER 81-2423)
The development of cryogenic wind tunnels and their application to maneuvering aircraft technology
(AIAA PAPER 81-1307)
AD-1 oblique wing aircraft program
(AIAA PAPER 81-1356)
Symmetric flow characteristics of thin rectangular wings
(AIAA PAPER 81-1380)
Experience with high performance V/STOL fighter projects at NASA
(AIAA PAPER 81-2614)
A summary of V/STOL inlet analysis methods
(AIAA PAPER 81-1928)
Advanced technology airfoil development for the "A" tilt-rotor vehicle
(AIAA PAPER 81-2623)
Trailing edge flap influence on leading edge vortex flap aerodynamics
(AIAA PAPER 81-0710)
Recent improvements in prediction techniques for supersonic weapons separation
(AIAA PAPER 81-0711)
An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil
(AIAA PAPER 82-0214)
Aerodynamics of tactical weapons to Mach number 8 and angle-of-attack of 180 deg
(AIAA PAPER 82-0250)
Viscous flow - women of the theoretician in pursuit of higher order accuracy
(AIAA PAPER 82-0350)
Evaluation of supersonic missile aerodynamic prediction techniques
(AIAA PAPER 82-0350)
Concerning the calculation of the aerodynamic characteristics of mechanized wings
(AIAA PAPER 81-1872)
A simplified wing procedure in connection with the lifting line theory and the doublet-lattice method
(AIAA PAPER 82-1919)
Use of high conical flow theory for the determination of the pressure distribution on the wave rider and its agreement with experimental results for supersonic flow
(AIAA PAPER 82-1919)
Ground effect hover characteristics of a large-scale twin tilt-duct V/STOL model
(AIAA PAPER 81-2609)
Thrust-induced effects on low-speed aerodynamics of fighter aircraft
(AIAA PAPER 81-2612)
Low-speed testing of the inlets designed for a tandem-fan V/STOL nacelle
(AIAA PAPER 81-2627)
Concept definition and aerodynamic technology studies for single-engine V/STOL fighter/attack aircraft
(AIAA PAPER 81-2647)
Aerodynamics of a transport aircraft-type wing-fuselage assembly
(ONERA TP NO. 1986-122)
Aerodynamic characteristics of waveriders at subsonic flight speeds
(AIAA PAPER 81-19810)
A perspective of computational aerodynamics from the viewpoint of airplane design applications
(AIAA PAPER 82-0018)
Transonic perturbation analysis of wing-fuselage-duct configuration with powered jet exhausts
(AIAA PAPER 82-0255)
Aerodynamic characteristics of aircrafts with ice accretions
(AIAA PAPER 82-0262)
Aerodynamic characteristics of maneuvering slabs
(AIAA PAPER 82-2200)
Aerodynamic evaluation of wingslets for transport aircraft
(AIAA PAPER 81-1215)
(PAEB 82-2245)
Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test
(AIAA PAPER 82-0548)
The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives
(AIAA 82-0595)
Structural and capabilities of the National Full Scale Facility 56- by 80-foot wind tunnel modification
(AIAA 82-0607)
Angle of downwash behind a wing in unsteady flow
(AIAA PAPER 82-2497)
Wing/control surface flutter analysis using experimentally corrected aerodynamics
(PAEB 82-2656)
AERODYNAMIC CHORDS


Proceedings of the 12th Navy Symposium on Aerodynamics, volume 1

[AD-A111763] p0463 882-27225

II-59A FOC technology demonstrator altitude expansion and operational tests

[AD-A111114] p0469 882-27282

Proceedings of the 12th Navy Symposium on Aerodynamics, volume 2

[AD-A111773] p0472 882-27312

A summary of V/STOL inlet analyses methods


Aerodynamic and optical propagation characteristics of a large-scale turret model

[AD-A111391] p0529 882-28624

Aerodynamics of an airfoil with a jet issuing from its surface

[HAS-A-78-8476] p0531 882-29267

User's manual for the Automated Paneling Technique (APT) and the NASA Body Aerodynamic Technique (NABAT) programs


Materials and design criteria for Kevlar-29 ribbon parachutes

[AD-A116335] p0567 882-31308

Dynamical System Coupling (DYSOC) program. Volume 1: User's manual

[AD-A115083] p0573 882-31974

Long duct nacelle aerodynamic Development for DC-10 derivatives


Energy efficient engine: High pressure turbine uncooled configuration report


Propeller flow visualization techniques

[AD-A116335] p0597 882-32672

User's manual for interfacing a leading edge, vortex roller program with two linear panel methods


The aerodynamic influences of rotor blade taper, twist, airfoils and solidity on hover and forward flight performance

[AD-A117397] p0605 882-33357

A simulation language approach to structural interaction problems

[PO314 882-33758

AERODYNAMIC CHORDS

U  AIRFOIL PROFILES

AERODYNAMIC COEFFICIENTS

The effects of flexibility on the steady-state performance of small-ratio parachute models

[AIAA PAPER 81-1922] p0006 882-10408

Analysis of escape systems at 677 KES

[PO079 882-14978

Vortex lift augmentation by suction on a 60 deg swept Gothic wing

[AIAA PAPER 82-0231] p0117 882-17856

Effect of the leading edge type on the aerodynamic damping of blade vibrations with allowance for the profile curvature

[PO127 882-16684

Sensitivity of helicopter aeromechanical stability to dynamic inflow

[PO273 882-25773

Prediction of aerodynamically induced vibrations in turbomachinery blading

[PO327 882-26586

Aerodynamic coefficient identification of two-varying aircraft system and its application

[PO529 882-36645

Analytical study of vortex flows on highly swept delta wings

[PO515 882-41003

Fuselage effects in leading edge vortex flap aerodynamics

[PO516 882-41006

Aeroelastic equilibrium of a helicopter rotor in its presence of nonlinear aerodynamic forces

[NOAKA, TP NO. 1982-31] p0547 882-42809

Transonic flutter and response analyses of two 3-degree-of-freedom airfoils

[PO555 882-44245

AERODYNAMIC CHORDS

V  AIRFOIL PROFILES

AERODYNAMIC COEFFICIENTS

Finite element approach to the calculation of unsteady aerodynamic influence coefficients in dynamic aerelastic analysis

[PO581 882-45849

Determination of airplane model structure from flight data by using modified stepwise regression

[PO520 882-10404

Wind tunnel results for a modified 17-percent-thick low-speed airfoil section


ACTA Mechanics Simulate (selected articles)

[AD-A107322] p0311 882-14600

Lifting surface theory for wings in a low frequency small amplitude yawing and side slipping oscillating motions at low speeds

[PO321 882-14601

Low-speed aerodynamic performance of a high-aspect-ratio supercritical-wing transport model equipped with full-span slat and part-span double-slotted flaps

[HAS-A-1562] p0339 882-15015

High lift selected concepts


Aerodynamic considerations in the prediction of uninstalled supersonic flutter in transonic fans

[PO143 882-15058

A new method of estimating the lateral wall effect on the airflow incidenve due to the suction at side walls

[RI-AI-60] p0308 882-17123

Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing

[AD-A107727] p0339 882-17134

Theoretical investigations on the influence of different strake, tail unit, and conventional NLR arrangement as well as of CIV on the aerodynamic characteristics of fighter aircraft configurations

[AD-FF-122/5/PUR/36] p0255 882-18211

A criterion for the prediction of the recovery characteristics of spinning aircraft

[BAE-AERO-2251] p0267 882-19223

Influence of strakes on coefficients of longitudinal stability

[AD-FF-122/5/PUR/22] p0319 882-21125

Real time digital filtering test in the 51 continuous wind tunnel at 60 deg

[PO343 882-22152

Effect of nacelles on aerodynamic characteristics of an executive-jet model with simulated, partial-chord, laminar-flow-control wing glove


Approximate method for predicting supersonic normal force coefficient very-low-aspect-ratio lifting surfaces

[AD-A111770] p0369 882-23199

The effect of very heavy rain upon aircraft and its role in wind shear attributed accidents

[PO401 882-25179

Experimental analysis of the effects of sweep and aspect ratio on incompressible flow about forward swept wings

[PO405 882-25223

Leading edge flap system for aircraft control augmentation

[HAS-CAS-LAB-12278-7] p0407 882-25240

Hurricane-induced wind loads

[PO82-12267] p0476 882-27548

Prelaunch estimates of near Earth satellite lifetimes using quasi-dynamic atmospheres models - application to a proposed Brazilian satellite

[INPE-2225-PER/190] p0538 882-29347

AERODYNAMIC CONFIGURATIONS

ST  WING NACELLE CONFIGURATIONS

Analysis of escape systems at 677 KES

[PO079 882-14978

Direct approach to aerodynamic design problems

[PO105 882-16404

Development and validation of the V/STOL aerodynamics and stability control manual

[AIAA PAPER 81-2611] p0107 882-16903

Optimum configuration for a 10 passenger business jet airplane

[AIAA PAPER 82-0365] p0119 882-17905

Analysis of an ideal-fluid flow past a finite-thickness wing

[PO165 882-19813
AERODYNAMIC FORCES

Wind tunnel test and analysis techniques using powered simulators for civil nacelle installation drag assessment

Establishment of an experimental technique to provide accurate measurement of the installed drag of close coupled civil nacelle/airframe configurations, using a full span model with turbine powered engine simulators

Prop-fan integration at cruise speeds

Optimization and performance calculation of dual-rotation propellers

An afterbody drag balance --- transonic wind tunnel gages

Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices (data report)

Finite element calculation of the aerodynamic forces on a vibrating wing in supersonic flow

Calculation of quasi-stationary aerodynamic force \( A \)EBOOIHAHIC LOADS

Humerical computation of unsteady subsonic aerodynamic effects of shape, camber, pitch, and ground proximity on idealized ground-vehicle bodies

Numerical computation of unsteady subsonic aerodynamic forces on wing-body-tail exposed to travelling gust

Results of recent measurements on an oscillating aerofoil

Unsteady response of rectangular wings in spanwise uniform shear flow

Flutter analysis using nonlinear aerodynamic forces

Forward-swept-wing technology

Finite element calculation of the aerodynamic forces on a vibrating wing in supersonic flow

Y descreas of the normal force of a wing of complex planform under unsteady motion

An estimation of aerodynamic forces and moments on an airplane model under steady state spin conditions

Lateral aerodynamics of delta wings with leading edge separation

Inlet and airframe compatibility for a V/STOL fighter/attack aircraft with top-mounted inlets

Aerodynamic interactions between a 1/6-scale helicopter rotor and a body of revolution

Reduced nonlinear flight dynamic model of elastic structure aircraft

Aeroelastic equilibrium of a helicopter rotor in the presence of nonlinear aerodynamic forces

Aerodynamic heating of the upper surface of plane wings of various planforms

The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade

Accounting for thickness effects in the calculation of subcritical unsteady aerodynamic forces: Application to wing-fuselage interactions

Experimental verification of force determination from vibration response measurements application to turbomachine blades

A method for force determination from vibration response measurements --- application to turbomachinery blades

Calculation of unsteady aerodynamic force acting on a cascade of oscillating airfoils in subsonic flow

The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade

Aerodynamic interactions between a 1/6 scale helicopter rotor and a body of revolution

AERODYNAMIC HEAT TRANSFER

Heat transfer measurements of a transonic nozzle guide vane

A durable, intermediate temperature, direct reading heat flux transducer for measurements in continuous wind tunnels

In-situ calibration of flight heat transfer instrumentation

Raytheon aerodynamic heating effects on boreight error

Duplication of radome aerodynamic heating using the Central receiver Test Facility solar furnace

Approximate method of predicting heating on the windward side of Space Shuttle Orbiter and comparisons with flight data

An experimental study at free-stream Mach 5 of the aerodynamic heating of the upper surface of plane wings of various planforms

Variational equation of an eccentrically reinforced panel with allowance for nonuniform heating

SUBJECT INDEX

p0095 A82-13088
p0131 A82-14009
p0135 A82-14103
p0139 A82-15014
p0198 A82-17126
p0368 A82-23238
p0403 A82-25198
p0499 A82-29424
p0506 A82-30504
p0510 A82-40917
p0556 A82-44667
p0588 A82-56490
p0594 A82-57127
p0614 A82-58672
p0620 A82-59582
p0623 A82-60044
p0648 A82-35426
p0713 A82-17437
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>AERODYNAMIC LOADS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A durable, intermediate temperature, direct reading heat flux transducer for</td>
<td>[NASA-TR-76-0788] p0557 B32-30287</td>
</tr>
<tr>
<td>continuous wind tunnels [AIAA 1077291]</td>
<td>AERO-HYDRAULIC LIFT</td>
</tr>
<tr>
<td>Historical perspectives on thermostructural research at the NASA Langley</td>
<td>U LIFT</td>
</tr>
<tr>
<td>AERODYNAMIC INTERFERENCE</td>
<td></td>
</tr>
<tr>
<td>Effects of vane/blade ratio and spacing on fan noise [AIAA PAPER 81-2033]</td>
<td></td>
</tr>
<tr>
<td>Airframe effects on top-mounted inlet systems for VTOL fighter aircraft</td>
<td></td>
</tr>
<tr>
<td>Numerical comparison of unsteady subsonic aerodynamic forces on wing-body</td>
<td></td>
</tr>
<tr>
<td>Transonic wind tunnel wall interference corrections for three-dimensional</td>
<td></td>
</tr>
<tr>
<td>Ducted-fan solutions of supersonic wing-body interference</td>
<td></td>
</tr>
<tr>
<td>Darrieus rotor aerodynamics</td>
<td></td>
</tr>
<tr>
<td>Thrust reverser induced flow interference on tactical aircraft stability and</td>
<td></td>
</tr>
<tr>
<td>Experimental and theoretical studies of light</td>
<td></td>
</tr>
<tr>
<td>Computational and experimental studies of light</td>
<td></td>
</tr>
<tr>
<td>The use of adaptive walls in plane flows</td>
<td></td>
</tr>
<tr>
<td>Higher-order flow angle corrections for three-dimensional wind tunnel wall</td>
<td></td>
</tr>
<tr>
<td>Airframe-propulsion system aerodynamic interference predictions at high</td>
<td></td>
</tr>
<tr>
<td>Optimum performance and wake geometry of co-axial</td>
<td></td>
</tr>
<tr>
<td>Numerical approach to co-axial rotor aerodynamics</td>
<td></td>
</tr>
<tr>
<td>Helicopter rotor downwash: Results of experimental research at the</td>
<td></td>
</tr>
<tr>
<td>investigations of the separation behavior on</td>
<td></td>
</tr>
<tr>
<td>The effect of a well on the aerodynamics of a</td>
<td></td>
</tr>
<tr>
<td>Theoretical and experimental investigations of wind tunnel interference due</td>
<td></td>
</tr>
<tr>
<td>A numerical investigation of two-dimensional,</td>
<td></td>
</tr>
<tr>
<td>Experimental determination of flow-interference</td>
<td></td>
</tr>
<tr>
<td>Experimental determination of flow-interference</td>
<td></td>
</tr>
<tr>
<td>Investigation of the interference effects of mixed</td>
<td></td>
</tr>
<tr>
<td>Investigation of the interference effects of mixed</td>
<td></td>
</tr>
<tr>
<td>Determining hinge moments and unsteady airflow</td>
<td></td>
</tr>
<tr>
<td>Improved techniques for the calibration and</td>
<td></td>
</tr>
<tr>
<td>Development of a comprehensive analysis for</td>
<td></td>
</tr>
<tr>
<td>Calculation of the unsteady loads on the surface of</td>
<td></td>
</tr>
<tr>
<td>On the track of practical forward-swept wings</td>
<td></td>
</tr>
<tr>
<td>Rotor blade pressure distribution on wings and bodies at high angles of attack</td>
<td></td>
</tr>
<tr>
<td>Operating flight loads and their effect on engine</td>
<td></td>
</tr>
<tr>
<td>Hypothetical fatigue life problem - Application of</td>
<td></td>
</tr>
<tr>
<td>The model 412 multi-bladed rotor system</td>
<td></td>
</tr>
<tr>
<td>Helicopter vibration suppression using simple pendulum absorbers on the rotor</td>
<td></td>
</tr>
<tr>
<td>A simple crack closure model for prediction of variable-amplitude loading</td>
<td></td>
</tr>
<tr>
<td>The stressed state of a parachute canopy during opening</td>
<td></td>
</tr>
<tr>
<td>Application of a transonic potential flow code to the</td>
<td></td>
</tr>
<tr>
<td>Determination of rotor wake induced</td>
<td></td>
</tr>
<tr>
<td>Supersonic missile aerodynamic and performance</td>
<td></td>
</tr>
<tr>
<td>Dynamic load measurements with delta wings</td>
<td></td>
</tr>
<tr>
<td>Maneuver stability of a vehicle with a towed body</td>
<td></td>
</tr>
<tr>
<td>The use of linearized-aerodynamics and vortex-flow methods in</td>
<td></td>
</tr>
<tr>
<td>Theory and application of optimum airloads to</td>
<td></td>
</tr>
<tr>
<td>Performance of the Rotor Systems Research Aircraft</td>
<td></td>
</tr>
<tr>
<td>Results of the AH-64 Structural Demonstration</td>
<td></td>
</tr>
<tr>
<td>Gust load alleviation on aircraft A 30</td>
<td></td>
</tr>
<tr>
<td>Investigation of the unsteady airflow on a transport</td>
<td></td>
</tr>
<tr>
<td>Aerodynamics on a transport aircraft type</td>
<td></td>
</tr>
<tr>
<td>a-13</td>
<td></td>
</tr>
</tbody>
</table>
Application of the ONERA dynamic stall model to a helicopter blade in forward flight

[ONERA, TP No. 1980-89]

An experimental study of separated flow on a finite wing

[ALAA PAPER 81-1882]

Aerelasticity of compressor blades - Subsonic stall flutter

[ALAA PAPER 82-2699]

A computer-controlled oscillation mechanism for unsteady aerodynamics experiments

[ALAA PAPER 82-29018]

Effects of dynamic stall on SWMS - Small Wind Energy Conversion System

[ALAA PAPER 82-33707]

Will ABC technology produce the next-generation helicopter

[ALAA PAPER 82-3916]

The performance of centrifugal compressor channel diffusers

[ALAA PAPER 82-3579]

Effect of the rear stage casing treatment on the overall performance of a multistage axial-flow compressor

[ALAA PAPER 82-35344]

A simple model for helicopter

[ALAA PAPER 82-3591]

Individual-Blade-Control and its application to stall flutter suppression

[ALAA PAPER 82-37765]

A simple model for helicopter

[ALAA PAPER 82-40055]

Prediction of high alpha flight characteristics utilizing rotary balance data

[ALAA PAPER 82-40953]

Aerelastic equilibrium of a helicopter rotor in the presence of nonlinear aerodynamic forces

[ALAA PAPER 82-42809]

Transient phenomena of shock-induced turbulent separation for a supersonic and transonic speeds

[ALAA PAPER 82-42950]

Spin recovery training --- Licensing requirement

[ALAA PAPER 82-43900]

A simple model for helicopter

[ALAA PAPER 82-42950]

Experimental investigation of the rotating stall, surge, and wake behind the rotor for a single stage axial compressor

[ALAA PAPER 82-43900]

Compressor stall inducing installation effects of an engine control parameter for the CF-5 aircraft

[ALAA PAPER 82-43900]

On the numerical analysis of stall flutter in turbine cascades

[ALAA PAPER 82-45054]
AERODYNAMIC VEHICLES

Effects of wing-leading-edge modifications on a high-lift, low-drag general aviation airplane: wind-tunnel investigation of high-angle-of-attack aerodynamic characteristics conducted in Langley 30- by 60-foot tunnel [NASA-TP-2011] p0466 N82-26217


AERODYNAMICS

WT AEROTHERMODYNAMICS

WT HYPERSONICS

WT ROCKET AERODYNAMICS

Control laws for adaptive wind tunnels p0012 N82-10985

The CIVIC - A concept in vortex induced combustion. II [ASME Paper 81-GT-12] p0017 N82-11997

Rapid elliptic solvers p0082 N82-15827

Remarks on the calculation of transonic potential flow by a finite volume method p0082 N82-15835

Some aerodynamic aspects of hang gliding p109 N82-17124

Technical evaluation report of the AGARD Fluid Dynamics Panel Symposium on computation of viscous-inviscid interactions [OHEBA, TP. NO. 1981-116] p0163 N82-19737

International Conference on Methodical Methods in Fluid Dynamics, 7th, Stanford University, Stanford and Rocket Field, CA, June 27-29, 1980, Proceedings p0234 N82-24426

Aerodynamics - Retrospect and prospect /74-31st Lanceht Memorial Lecture/ p0275 N82-26009

Computational fluid dynamics - The coming revolution p0277 N82-26366

The effect of swirl burner aerodynamics on 80x formation p0326 N82-26580

Measurement of aerodynamic work during fan flutter p0327 N82-26987

Vertical takeoff technology - Flight mechanics, aerodynamics, and propulsion systems --- German book p0381 N82-33348

Aerodynamics. Part 2 - Methods of aerodynamic design /3rd revised and enlarged edition/ --- Russian book p0382 N82-33387

Aerodynamics: The science of air in motion /2nd edition/ --- Book p0383 N82-33671

Flow visualization techniques for the study of high incidence aerodynamics /OHEBA, TP. NO. 1982-5/ p0389 N82-34943

CFD technology for propulsion installation design - Forecast for the 80's --- computational fluid dynamics in aerospace applications [ASME Paper 82-GT-21] p0420 N82-35289

Practical aerodynamic problems - Military aircraft p0431 N82-35556


Aerodynamic research applications at Boeing p0515 N82-41000

Modern compressible flow with historical perspective --- Book p0546 N82-42552

Computational aerodynamics p0581 N82-45851

Investigation of the aerodynamics of anisymetric bodies in supersonic flow in the presence of localized injection p0583 N82-46692

Nonlinear transonic flutter analysis [AIAA Paper 81-6088] p0583 N82-46847

Development of high loading, high efficiency axis flow turbine p0583 N82-47069

Analysis of tapered-laid hybrid aeroelastic journal bearings p0584 N82-47944

Aerodynamic calculations and design of subcritical aerfoils p0032 N82-10983

Effect of a part span variable inlet guide vane on TP74 fan performance [NASA-CP-165458] p0088 N82-12075


Research and Technology [NASA-TR-83221] p0091 N82-13043

Prediction of aeroelastic flutter in engine exhaust interactions p0097 N82-13096

Predesign study for a modern 4-bladed rotor for the NASA rotor systems research aircraft [NASA-CP-166153] p0167 N82-16042

Flight dynamics technology development: Structures and dynamics, vehicle equipment/subsystems, flight control and aeromechanics [AD-A056636] p0195 N82-17082

Scientific report of the Fluid Mechanics Research Department p0213 N82-17469

XFV-12A diagnostic and development program [AIAA-PAP-81-0608] p0583 N82-18206

Tendencies in the development of subsonic transport aircraft with special consideration of aerodynamics [NASA-TR-705] p0255 N82-18214

Air Force Academy aeronautics digest Fall/Summer 1980 [AD-A100338] p0301 N82-20139

Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft [NASA-TP-1911] p0305 N82-20187

Cold-air performance of a 15.41-cm-tip-diameter axial-flow power turbine with variable-area rotor designed for a 75-kW automotive gas turbine engine p0316 N82-21193


An accurate method for evaluating the kernel of the integral equation relating lift to downwash in unsteady potential flow [NASA-TR-83281] p0363 N82-23194

Combining analysis with optimization at Langley Research Center. An evolutionary process [NASA-TR-84472] p0400 N82-24866


General aviation activity and avionics survey [AD-A112524] p0521 N82-28244

Aerodynamics of advanced axial-flow turbomachinery [AD-A114911] p0537 N82-29328


Computational aerodynamics and design [NASA-TR-84257] p0605 N82-33348

AEROELASTICITY

WT AEROTHERMOPHYSICALITY

Aeroelasticity matters - Some reflections on two decades of testing in the NASA Langley Transonic Dynamics Tunnel p061 N82-13969

Application of the ONERA dynamic stall model to a helicopter blade in forward flight [OHEBA, TP. NO. 1981-09] p0622 N82-13992

In-flight deflection measurement of the NASA aerodynamically tailored wing [AIAA Paper 81-2650] p0643 N82-13831

Comparison of wind tunnel and theoretical aerelastic predictions with flight measured airloads for the B-1 aircraft [AIAA Paper 81-2307] p0665 N82-14039

Effect on surface pressures of trapezoidal holes in a T-38 stabilizer p0113 N82-17602

SUBJECT INDEX
AERONAUTICS
U GEMANHEIS
U FLUTTER
AERONAUTICAL ENGINEERING
Aeromotronics in China - An AIAA report --- Book
 progression in aeromotronics research and technology applicable to civil air transports
You Karas and VHI - The last 25 years
NASA research in aircraft propulsion
NASA paper 82-Oct-177

AEROMAGNETISM
U GEMANHEIS
U FLUTTER
AERONAUTICAL ENGINEERING
Aerodynamics in China - An AIAA report --- Book

Subject Index
**SUBJECT INDEX**

<table>
<thead>
<tr>
<th>EXPERIMENTAL VERIFICATION OF FORCE DETERMINATION AND GROUND FLYING ON A FULL-SCALE AIRCRAFT</th>
<th>p0045 A82-202019</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR-64 HELICOPTER</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>The TADS/PFVS &quot;eyes&quot; for the AH-64 attack helicopter</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>The application of strapdown inertial technology to Attitude and Heading Reference System requirements --- for TAH-64 advanced attack helicopter</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Advanced attack helicopter fatigue testing - Overview</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>The TAH-64A composite flexible tail rotor</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Structural design of a crashworthy landing gear for the AH-64 Attack Helicopter</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Results of the AH-64 Structural Demonstration</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Apache to provide night/bad weather capability</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Pre-design study for a modern four-bladed rotor for the Rotor System Research Aircraft (RSRA) --- integrating the TAH-64 main rotor</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>AILEBHS</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>NT SPOILER SLOT ALLENS</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Trim tab excitation system for the Bae 146</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Sonic fatigue testing of an advanced composite aileron</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>[AIAA PAPER 81-0634]</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Structural optimization of a swept wing on the basis of the aileron efficiency condition</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>[NASA-TR-81-83192]</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Limited evaluation of an F-144 airplane utilizing an aileron-rudder interconnect control system in the landing configuration</td>
<td>p0045 A82-12329</td>
</tr>
<tr>
<td>Investigation on rotating ailerons</td>
<td>p0045 A82-12329</td>
</tr>
</tbody>
</table>

**AERIALS**

| AIR COMPRESSED AIR | p0045 A82-12329 |
| AIR BAG RESTRAINT DEVICES | p0045 A82-12329 |
| Air bag impact attenuation system for the AGS-JAV | p0045 A82-12329 |
| Remote piloted vehicle | p0045 A82-12329 |
| [AIAA PAPER 81-1917] | p0045 A82-12329 |
| Development of a supported airbag ejection restraint (SABER) for warblast protection | p0045 A82-12329 |
| [AD-A105980] | p0045 A82-12329 |

**AIR BEARINGS**

| U GAS BEARINGS | p0045 A82-12329 |

**AIR BREATHING ENGINES**

| NT BRISTOL-GIDDELL BS 53 ENGINE | p0045 A82-12329 |
| NT GAS TURBINE ENGINES | p0045 A82-12329 |
| NT J-79 ENGINE | p0045 A82-12329 |
| NT J-85 ENGINE | p0045 A82-12329 |
| NT JET ENGINES | p0045 A82-12329 |
| NT POLSUMPY ENGINES | p0045 A82-12329 |
| NT BARDIT ENGINES | p0045 A82-12329 |
| NT SUPERSONIC COMBUSTION BARDIT ENGINES | p0045 A82-12329 |
| NT T-56 ENGINE | p0045 A82-12329 |
| NT TURBOFANS | p0045 A82-12329 |
| NT TURBOPROPS | p0045 A82-12329 |

**AIR BREATHING ENGINE TEST FACILITIES REGISTRY**

| [AGARD-AD-269] | p0045 A82-12329 |
| Multiple pore expansion strut assembly --- air breathing engines | p0045 A82-12329 |
| [NASA-CR-1166-1-1] | p0045 A82-12329 |

**AIR CARGO**

| TOWARD VIA AIR-CARGO SERVICE | p0045 A82-12329 |
| Handling air freight in the 1980s - Meeting the challenge | p0045 A82-12329 |
| Advanced intermodal cargo systems concept demonstration and evaluation | p0045 A82-12329 |
| [AD-A111950] | p0045 A82-12329 |
| [AD-A111950] | p0045 A82-12329 |

**AIR CONDITIONING EQUIPMENT**

| TOWARDS MINIMUM POWER FOR ENVIRONMENTAL CONTROL IN TRANSPORT AIRCRAFT | p0045 A82-12329 |
| [AIAA PAPER 81-086-4] | p0045 A82-12329 |
| USF environmental noise data handbook. Volume 167: 38-38 air conditioner | p0045 A82-12329 |

**AIR COOLING**

| AIR-FILLED COOLING RETURNS TO RANJETS | p0045 A82-12329 |
| Thermal and flow analyses of a conversion, air-cooled ceramic coated porous metal concept for turbine vanes | p0045 A82-12329 |
| [AIAA PAPER 81-07-68] | p0045 A82-12329 |
| Application of numerical modeling to gas turbine combustor development problems | p0045 A82-12329 |
| The operational characteristics of turbojets, giving particular attention to the cooled high-pressure turbine | p0045 A82-12329 |
| Transient two-dimensional temperature distributions in air-cooled turbine blades | p0045 A82-12329 |
| Impingement cooling of concave surfaces of turbine airfoils | p0045 A82-12329 |
| Air cooled engine test facilities | p0045 A82-12329 |
| Air cooling of gas turbine blades | p0045 A82-12329 |
| The effect of coolant flow on the efficiency of a transonic HP turbine profile suitable for a small engine | p0045 A82-12329 |
| [AIAA PAPER 80-67-3] | p0045 A82-12329 |
| In aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine | p0045 A82-12329 |
| [NAV-32-3211] | p0045 A82-12329 |
| Acoustic measurements of F-16 aircraft operating in haze house: , N82-4020-070-272 | p0045 A82-12329 |

**AIR CURRENTS**

| NT VERTICAL AIR CURRENTS | p0045 A82-12329 |
| AIR CUSHION LANDING SYSTEMS | p0045 A82-12329 |
| Kelvin-Helmholtz stability analysis of air cushion landing gear track flutter | p0045 A82-12329 |
| Experimental and analytical studies of advanced air cushion landing systems | p0045 A82-12329 |

**AIR CUSHION VEHICLES**

| U GROUND EFFECT MACHINES | p0045 A82-12329 |

**AIR DEFENSE**

| NT AREA/SECTOR DEFENSE | p0045 A82-12329 |
| SIMART - an air battle simulation of the US AF Tactical Air Control System (TACS) with Advanced Tactical radars | p0045 A82-12329 |
| The PATRIOT radar in tactical air defense | p0045 A82-12329 |
| Logistics research program in the United States Air Force | p0045 A82-12329 |
| Passive aircraft location | p0045 A82-12329 |
| Array Lynx: Product development matched to military combat development | p0045 A82-12329 |
| A light helicopter for night firing | p0045 A82-12329 |
| Tethered rotorplatforms and their mission potential | p0045 A82-12329 |
| Multi-mission V/SXOL with vectored thrust engines --- bowing, air superiority (PBE-9008) | p0045 A82-12329 |

**AIR DROP OPERATIONS**

| Simulation of the interaction between airdrop platforms and aircraft rollers | p0045 A82-12329 |
| [AD-A116170] | p0045 A82-12329 |

**AIR DUCTS**

| The excitation of compressor/duct systems | p0045 A82-12329 |

**AIR FILTERS**

| HAVEN AIRCRAFT FILTER-ABSORBER --- agricultural aircraft | p0045 A82-12329 |

**AIR FLOW**

| NT VERTICAL AIR CURRENTS | p0045 A82-12329 |
| Application of numerical modeling to gas turbine combustor development problems | p0045 A82-12329 |
| Experimental investigation of total pressure loss and airflow distribution for gas turbine combustors | p0045 A82-12329 |

**A-21**
The effect of ejector augmentation on test-section flow quality in the Calaisan 8-ft transonic wind tunnel [AIAA 82-0571] p0236 AB2-24658
Pressure measurements on twin vertical tails in buffetting flow [AIAA 82-0641] p0337 AB2-30138
Feedback control of a cantilever wing in steady airflow [AIAA 82-0729] p0340 AB2-30177
Aerodynamics: The science of air in motion /2nd edition/ --- Book p0383 AB2-33671
Experimental study on discharge and loss coefficients of combustor swirlers p0390 AB2-34644
A semi-empirical analysis of liquid fuel distribution downstream of a planar orifice injector under cross-stream airflow [AIAA PAPER 82-02-16] p0420 AB2-35285
Gas turbine airflow control for optimum heat recovery [AIAA PAPER 82-02-02] p0423 AB2-35329
Fluctuating forces and rotor noise due to distorted airflow p0510 AB2-40945
Wind-tunnel testing of V/STOL configurations at high lift p0510 AB2-40949
A miniature electro-optical air flow sensor p0543 AB2-41850
Laser Doppler anemometry applied to the study of airflow in the wake of an helicopter rotor [OHRRA, TP 80, 1982-61] p0552 AB2-43755
A vapore cycle cabin cooling system for the Sea King N.50 helicopter [AD-A105211] p0568 AB2-12069
System for acquisition and analysis of dynamic tests on air intakes [NASA-TN-768648] p0571 AB2-14056
Combustion behavior of solid fuel ramjets. Volume 1: Correlation of reacting and non-reacting flow characteristics [AD-A106061] p0573 AB2-14316
LIDAR pod/AV-OC environmental evaluation flight test [AD-A110198] p0591 AB2-21178
Studies on wind tunnel straighteners [NASA-TN-768689] p0595 AB2-22284
Active Clearance Control System for a turboshaft [NASA-CASE-LW-12938-1] p0591 AB2-32366
AIR FREIGHT
AIR CARGO
AIR INLETS
AIR INTAKES
AIR ENGINES
AIR AIRCRAFT
AIR AIRCRAFT CONFIGURATIONS
AIR SUPERSONIC INLETS
Low speed testing of the intakes designed for a tandem-fan V/STOL nozzle --- conducted in the Lewis 10 by 10 foot wind tunnel [NASA-TN-768724] p0034 AB2-11042
Transonic flows in an air inlet with large incidence and the effect of a blowing tip [NASA-CR-165611] p0094 AB2-13071
An acquisition and analysis system for dynamic tests of air inlets p0095 AB2-13082
Studies of air intakes at Reynolds numbers comparable to flight in ONERA's F1 and 51HA wind tunnels p0096 AB2-13091
Airframe-propulsion system aerodynamic interference predictions at high transonic Mach numbers including off-design engine airflow effects p0097 AB2-13098
Wind tunnel tests of engine-equipped models: Comparison of two jet wash simulation methods [NASA-TN-768648] p0134 AB2-14091
Helicopter Propulsion Systems [AGARD-CP-302] p0206 AB2-17203
Helicopter air inlets p0208 AB2-17217
AIR INTAKES
Plain-jet airblunt atomization of alternative liquid petroleum fuels under high ambient air pressure conditions [AIAA PAPER 82-02-12] p0420 AB2-35293
Local heat transfer to staggered arrays of impinging circular air jets [AIAA PAPER 82-02-211] p0427 AB2-35401
Digital spectral analysis of the noise from short duration impulsively started jets p0434 AB2-36191
AERONAUTICS
Wind tunnel studies of store separation with load factor - Freedrops and captive trajectories p0383 AB2-33626
AERONAUTICS
Consequences of American airline deregulation: Legislative theory in a concrete example p0315 AB2-19947
Air transportation of handicapped persons p0220 AB2-24338
Predicting the application of vicarious liability to fixed base operators - Still gossamert after all these years p0377 AB2-32056
Aviation accident investigation - Functional and legal perspectives p0377 AB2-32059
Factors influencing settlement of personal injury and death claims in aircraft accident litigation p0377 AB2-32062
Aviation negotiations and the U.S. model agreement p0377 AB2-32063
The DC-10 Chicago crash and the legality of SPAR 40 p0463 AB2-37812
The recognition of air worthiness of aircraft - Comments to a remarkable judicial decision p0464 AB2-38025
Noise pollution and airport regulation p0496 AB2-40051
O'Hare International Airport - Imperative to proposed state efforts to limit airport noise p0496 AB2-40052
Extracts from Problems of Air Law, a collection of works of the Section of air law of the Aviakha Society of the USSR and Aviakha RSFSR [NASA-TN-768913] p0565 AB2-31153
AER NAVIGATION
AT ALL-WEATHER AIR NAVIGATION
AT AREA NAVIGATION
AT BEYOND-THE-EARTH NAVIGATION
Three navigation systems and their costs of acquiring remote sensing data p0001 AB2-10049
Navigation task partitioning in distributed-processing avionics systems p0009 AB2-10646
Discrete address beacon, navigation and landing system p010 AB2-10650
Fast and accurate gyrocompass using strapdown tuned rotor gyros as a solution to combat helicopters navigation problems p016 AB2-11927
National Aerospace Meeting, Tresoro, PA, April 8-10, 1981, Proceedings p021 AB2-12626
Satellite geometry considerations for lo? cont GPS user equipment p021 AB2-12630
A solution to the static geometry problem for JTIDS relative navigation p022 AB2-12634
Memory requirements for future navigation systems p022 AB2-12637
A navigation systems planning model p022 AB2-12640
The integrated inertial sensor assembly /JTIDS/ - A redundant strapdown system for advanced aircraft p022 AB2-12640
navigation and flight control functions.

Integrated satellite navigation and stopwag
designed attitude and heading reference systems for civil
air carriers.

Ring Laser Gyro Navigator /RL/G/ flight test results.

Fuel efficient flight profiles in an ATC flow
management environment.

An update of an integrated CMI system — TIES —
Communication, Navigation, and Identification
provided by Tactical Information Exchange System
(AIAA 81-2223).

Time-stamping of data in an asynchronous
environment --- for fighter aircraft avionics
(AIAA 81-2312).

A Loran-C prototype navigation receiver for
general aviation.

Estimation of the efficiency of radioelectronic
flight navigation systems.

Instrumentation to determine the suitability of
EARM systems for helicopter navigation in the
national airspace system /NAS/
(AIAA PAPER 81-2514).

Navaid Global Positioning System flight test
program overview.

Electromagnetically agile Radar/Gimballed Electrically
suspenos gyro airborne navigation system
(AIAA 82-1270).

The agile transversal filter - A flexible building
block for CMIA --- integrated Communications,
Navigation, and Identification Avionics.

Application of multiple model estimation
techniques to a recursive terrain height
estimation system.

Technical/operational ATC scenarios for future TMA
navigation.

The LANTERN wide field-of-view master Head-Up
Display --- Low Altitude Navigation and
Targeting for Flight
(AIAA 82-14825).

Selecting the best 1990 civil aviation
radionavigation system.

Solid-state VOR/OMC with remote maintenance and
monitoring.

Position extrapolation quality calculation for
inertial and Doppler-ABS navigation systems.

JTIDS distributed TDMA /TDMA/ terrestrial
development results with emphasis on relative
navigation performance.

JTIDS BelHAV network off-line simulation.

Post-flight assessment of the JTIDS Bel NAV
(AIAA 82-18154).

A natural parameter-controller specification
procedure for an integrated radio/dead reckoner
navigation system.

A stable decentralized filtering implementation
for JTIDS Bel NAV --- stable community relative
navigation.

JTIDS navigation system integrity and reliability for
civil aviation.

Enhanced noise immunity and error control in a
fully integrated JTIDS/GPS receiver --- Joint
Tactical Information Distribution System.

Data communications within the Air Navigation
Services system.

Modernizing the Egyptian A.T.C. system
(AIAA 82-18272).

Tornado-axonic development testing.

Institute of Navigation, Annual Meeting, 36th,
U.S. Naval Postgraduate School, Monterey, CA,

The emerging need for improved helicopter navigation.

Helicopters and Navaid/GPS
(AIAA 82-21592).

A simulator assessment of a wide field of view
head-up display for presenting a visual image
during low level navigation and ground
attack missions
(AIAA PAPER 82-0261).

Naviagional aids on-board the Concorde.

Institutes of Navigation, Annual Meeting, 37th,
U.S. Naval Academy, Annapolis, MD, June 9-11,

The application of NAVSTAR differential GPS in the
civilian community.

Beyond the horizon coverage for air navigation/traffic control.

Loran for precise position location - The VRE-HAV
system.

Analysis of Loran-C system reliability for civil
aviation.

Integration of multi-sensor navigation data using
optimal estimation techniques.

Radio-navigation equipment for aircraft - Devices
and operation --- Busman book.

HARP - A fault tolerant distributed microcomputer
structure for an lift navigational system.

Corona and antenna effects on the AH-53D
missesweeping helicopter and Baghdad navigation set.

Aviation electronics /3rd edition/ --- Book
(AIAA 82-27946).

Operational testing of the L8-33 inertial
navigation system.

Short-term behavior of a Doppler navigation system
and comparison with position indication by means of
scanning radar.

Certification of an airborne Loran-C navigation
system.

Prospects for Navig - A future worldwide civil
navigation/satellite system.

Prospects for NAVSTAR - A future worldwide civil
navigation/satellite system.

The Aviation Bonte Forecast /ABF/ program - An
interaction system for Pilot Self-Briefing.

SUBJECT INDEX
computer-aided weather service

Terminal area automatic navigation, guidance, and control research under the Microwave Landing System (MLS). Part 2: NHV/MLS transition problems for aircraft [NASA-CA-3511]

Aeronautical Information Data Subsystem (AIDS): A ground-based component of air navigation services systems

Integration of inertial sensors in helicopters

FAA/FCC coordination procedures for FM broadcast stations

Integrated navigation-TF/TA-system based on stored terrain data processing

The integration of multiple avionic sensors and technologies for future military helicopters

Joint University Program Air for Transportation Research, 1981 [NASA-CP-2224]

PPOD Programmable pilot-oriented display air navigation The P-POD Project --- error detection codes

Investigation of air transportation technology at Ohio University, 1981 --- local [889-26204]

Loran-C plotting program for plotting lines of position on standard charts

A Loran-C prototype navigation receiver for general aviation

A Loran-C prototype navigation receiver for general aviation

Investigation of air transportation technology at Princeton University, 1981 [889-26208]

Modernization of U.S.-505/USN Tactical Air Navigation (TACAN) antenna group [AD-1111680]

Low cost development of IHS sensors for expendable BVY control and navigation [AD-112691]


Operational and functional requirements for the navigation system in terminal areas [AD-116127]

Terrain following/terrain avoidance system concept development [AD-1107835]

AERIAL POLLUTION

Smoke reduction in FJH-710 turbofan engines by an exhaust converter [ASAS PAPER 82-03-24]

Fuel microemulsions for jet engine smoke reduction [ASAS PAPER 82-03-32]

On the corrosion problems of the TAF P-5 aircraft [801-92-1299]

Calculation of the contributions of air traffic and road traffic to air pollution in the region of Schiphol airport in 1974 [SLM-TR-77-71]

Control of air pollutants from aviation: The emission standard setting process [AD-1107835]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

AERIAL PURIFICATION

Small engine inlet air particle separator technology [ASAS PAPER 82-03-24]

AERIAL QUALITY

In situ ozone data for comparison with laser absorption remote sensor: 1980 FPE/WEOS program [NASA-TR-38471]

Air oxygen enriched air system for the AV-8A Harrier [AD-1107835]

Control of air pollution from aviation: The emission standard setting process

AERIAL TRAFFIC CONTROL

By automated EN ROUTE ATC

SUBJECT INDEX

Air Traffic Pollution

Terminal area automatic navigation, guidance, and control research under the Microwave Landing System (MLS). Part 2: NHV/MLS transition problems for aircraft [NASA-CA-3511]

Aeronautical Information Data Subsystem (AIDS): A ground-based component of air navigation services systems

Integration of inertial sensors in helicopters

FAA/FCC coordination procedures for FM broadcast stations

Integrated navigation-TF/TA-system based on stored terrain data processing

The integration of multiple avionic sensors and technologies for future military helicopters

Joint University Program Air for Transportation Research, 1981 [NASA-CP-2224]

PPOD Programmable pilot-oriented display air navigation The P-POD Project --- error detection codes

Investigation of air transportation technology at Ohio University, 1981 --- local [889-26204]

Loran-C plotting program for plotting lines of position on standard charts

A Loran-C prototype navigation receiver for general aviation

A Loran-C prototype navigation receiver for general aviation

Investigation of air transportation technology at Princeton University, 1981 [889-26208]

Modernization of U.S.-505/USN Tactical Air Navigation (TACAN) antenna group [AD-1111680]

Low cost development of IHS sensors for expendable BVY control and navigation [AD-112691]


Operational and functional requirements for the navigation system in terminal areas [AD-116127]

Terrain following/terrain avoidance system concept development [AD-1107835]

AERIAL POLLUTION

Smoke reduction in FJH-710 turbofan engines by an exhaust converter [ASAS PAPER 82-03-24]

Fuel microemulsions for jet engine smoke reduction [ASAS PAPER 82-03-32]

On the corrosion problems of the TAF P-5 aircraft [801-92-1299]

Calculation of the contributions of air traffic and road traffic to air pollution in the region of Schiphol airport in 1974 [SLM-TR-77-71]

Control of air pollutants from aviation: The emission standard setting process [AD-1107835]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

Smoke abatement system for crane rescue/fire training facilities [AD-1113830]

AERIAL PURIFICATION

Small engine inlet air particle separator technology [ASAS PAPER 82-03-24]

AERIAL QUALITY

In situ ozone data for comparison with laser absorption remote sensor: 1980 FPE/WEOS program [NASA-TR-38471]

Air oxygen enriched air system for the AV-8A Harrier [AD-1107835]

Control of air pollution from aviation: The emission standard setting process

AERIAL TRAFFIC CONTROL

By automated EN ROUTE ATC
AIB I1IEB IMSBACTIOI5
AIBBOBiB BQOIPBB8T
AIB IATEB lilBBACIlOiS
HI LIGHT AIBBOBBE flCLTIPOBPOSfi SfSTEfl
81 AIBBOBBE/SPACEBOB82 COHPOTBBS
Fighting forest fires with the aid of aircraft in
Fighting fire and other disasters from the air;
Selection of optimum antennas for tracking
napping in tropical forests - A new approach using
Airborne lidar measurements of smoke plume
Commercial airborne weather radar technology
Airborne Electronic Terrain flap Systea. II -
Instrumented aircraft verification of clear-air
radar detection of Ion-level wind shear
Instrumented aircraft verification of clear-air
radar detection of low-level wind shear
A mathematical model of an over-sea airborne UBF
radio link
High voltage surge and partial discharge test to
evaluate aerospace equipment parts
Or-board communication for active-contro1
transport aircraft
Detection range analysis of an airborne medium PBF
radar
Airborne Electronic Terrain Map Systen
Airborne Electronic Terrain Map Systen. II -
Applications
Commercial airborne weather radar technology
High voltage/high power for airborne applications
Design and performance of airborne radomes - A
Review
A GPS receiver design for general aviation
navigation
Flight measurements of Area Navigation System
performance using various combinations of ground
aids and airborne sensors
Airborne measurements with a sensitive high
resolution 90 GHz radiometer
Mapping in tropical forests - A new approach using
the laser APR --- Airborne Profile Recorder
Laser communications via an atmospheric link
Airborne lidar measurements of smoke plume
distribution, vertical transmission, and
particle size
LASPS III recovery assist, securing and traversing
//ASTYSTEM --- Light Airborne Multi-Purpose
System
Small ERP/SPF airborne SATCOM terminal
Selection of optimum antennas for tracking
telemetry instrumented airborne vehicles
Fighting fire and other disasters from the air;
International Scientific-Technical Symposium,
Hanover, West Germany, June 11, 12, 1980, Papers
Fighting forest fires with the aid of aircraft in
the United States of America

A-28

SUBJECT INDEX

p0330 AB-29577
Fighting forest fires - A task for the Swiss air
force
p0330 AB-29578
The current state of technology concerning the
fighting of forest fires from the air in Austria
p0330 AB-29579
The employment of agricultural aircraft in
economic operations for fighting forest fires
in Israel
p0331 AB-29580
The utilization of aircraft in fighting forest
fires - French experience
p0331 AB-29581
The use of 'water bombers' and chemical agents
against forest fires, taking into account the
employment of a first-attack system
p0331 AB-29582
The employment of two-engine and four-engine
aircraft for dropping the latent chemical fire
extinguishing agents in connection with the
fighting of forest fires
p0331 AB-29583
The employment of helicopters in Austria in
connection with large-scale fires in buildings
p0331 AB-29585
Performance characteristics and employment
profiles of the new helicopter BK117
p0331 AB-29586
A system design for a multispectral sensor using
two-dimensional solid-state imaging arrays
p0377 AB-31991
An optical data link for airborne scanning systems
p0391 AB-34737
Airborne warning systems for natural and
aircraft-initiated lightning
p0432 AB-35729
Certification of an airborne Loran-C navigation
system
p0432 AB-35876
A single-frequency multitransmitter telemetry
 technique
p0434 AB-36201
An accurate Doppler navigator with microwave
simplicity
p0435 AB-37037
Medium PBF performance analysis ---
Pulse-Repetition Frequency
p0436 AB-37378
Application of an optical data link in the
airborne scanning systems
p0491 AB-39275
Hover jam - US Army studies FH helicopter
p0578 AB-41088
Use of aircraft-derived data to assist in ATC
tracking systems. I - Accuracy and theoretical
considerations
p0546 AB-42504
Proposed multipurpose flying radio-physical
laboratory using an IL-16 aircraft
p0550 AB-43278
Passive direction finding and signal location
p0578 AB-45346
Measuring flexural loads by means of strain
transducers
p0582 AB-46619
A random vibration test for the evaluation of
stiff sensitive component parts
p0583 AB-47073
Aquila - Robot eye in the sky
p0584 AB-48025
Integration of complex systems in current and
future aircraft projects for the example of
airframes
[88B-UN-18-00-0] p0256 AB-1821
FM broadcast interference related to airborne ILS,
VOR and TACAN communications
[RTCA/DO-176] p0268 AB-19419
RADAR simulator for aircraft instruments
[701-C-40136-13] p0296 AB-22826
The 1981 direct strike lightning data ---
utilizing the F-106 aircraft
[NASA-TJ-82-27227] p0358 AB-22848
Testing of the Kuiper Airborne Observatory 91-C
telescope
[NASA-82-166341] p0400 AB-25040
Airborne gamma-ray spectrometer and magnetometer
survey, Barrow quadrangle, Alaska, volume 2
[0892-000362] p0513 AB-25623
Head-up displays - The integrity of flight information p0106 482-16562
EC-135 avionics modernization hot bench - An evaluation of requirements and design for the future p0157 482-19240
Radar environment simulation for software test p0158 482-19245
The significance of electronics for air traffic control at the present time and in the future p0163 482-19649
The impact of increasing energy costs upon the design philosophy of avionics fuel management systems p0169 482-20517
Thrust management - Current achievements and future developments p0170 482-20520
MLS flare low elevation angle guidance considerations p0175 482-20586
Tornado-avionics development testing p0177 482-20760
The use of dynamic mock-ups in the design of advanced systems (DOAP's Digital Avionics Information System and NAVY's Advanced Integrated Display System p0699 482-22902
High temperature engine control electronics p0213 482-26407
Localizer position location - The VIBMNAV system p0235 482-26468
Analysis of Loran-C system reliability for civil aviation p0236 482-26450
Flight condition recognition /FCA/ technique - Microprocessor-based recording for helicopter structural component fatigue damage p0239 482-24712
On-board computers save fuel and help ATC p0275 482-26046
The micro revolution comes to civil air transport p0329 482-29259
An approach to software for high integrity applications - in aircraft gas turbine engine control p0429 482-35430
Analysis of the peak count of actively controlled aircraft p0462 482-36447
FCS - A commercial flight management computer system p0484 482-36938
A preliminary laboratory evaluation of a reconfigurable integrated flight control concept p0485 482-36982
An MLS with computer aided landing approach p0489 482-39122
Flight management computers p0491 482-39321
The fourth dimension - flight management systems for airline operations p0492 482-39540
The control and guidance unit for FACHA p0493 482-39738
Boeing's new 767 crew workload p0497 482-40388
Airframe design for fuel efficiency p0512 482-40973
Investigations concerned with shifting pilot activities to a higher hierarchical stage of flight control - German ideas p0519 482-41453
A floating-point/multiple-precision processor for airborne applications p0544 482-41668
Integrated sensor system for flight test instrumentation p0544 482-41869
New trends and concerns in the airliner radio equipment market p0555 482-42238
High Order Languages /HOL/ for flight control applications [AAS 82-020] p0570 482-45608
The use of flight management computers in air carrier operations in the 1980s p0571 482-46010

airborne data analysis/monitor system p0130 482-14830
ADAMS executive and operating system p0130 482-14831
On-board computer program in development of A-310 flight testing program p0130 482-14833
RSLM computers in the flight testing of the Fokker F29 aircraft p0138 482-14839
Description of a dual fail operational redundant microprocessor instrumentation unit for integrated avionics systems research p0138 482-14842
Hierarchical specification of the SIFT fault tolerant flight control system p0197 482-17106
Reconfiguration: a method to improve systems reliability p0197 482-17107
Integrated control of mechanical systems for future combat aircraft p0197 482-17117
P/A-19A tactical airborne computerized subsystem p0197 482-17119
Development of a simple, self-contained flight test data acquisition system [NASA-CR-16604] p0213 482-17478
A-TE software module guide [AD-A106049] p0260 482-18920
Analysis of computer system configurations for highly integrated guidance and control systems p0363 482-23189
Development of a simple, self-contained flight test data acquisition system [NASA-CR-166012] p0369 482-22425
On line experiments in acquiring and exploiting AINS data for ATC purposes p0401 482-25175
An intermediate solution between basic and expanded aircraft integrated data systems (AIDS) p0402 482-25182
An assessment of the real-time application capabilities of the SIFT computer system [NASA-TP-04062] p0413 482-25811
PPOD Programmable pilot-oriented display - Flight navigation p0445 482-26201
A floating-point/multiple-precision processor for airborne applications, [NASA-TP-04252] p0452 482-26209
AUPilot: A distributed planner for air fleet control [AD-101730] p0467 482-27269
Pave Hower aided integrated strike avionics system p0671 482-27298
Advanced aircraft electrical system control technology demonstrator, Phase 1: Analysis and preliminary design [AD-A113633] p0524 482-28084
Problems related to the integration of fault tolerant aircraft electronic systems [NASA-CR-166026] p0530 482-29022
Final engineering report for computer, weapons aiming CP-1466A p0569 482-31327
Multilevel semantic analysis and problem-solving in the flight domain [NASA-CR-166021] p0573 482-31967

AIBUS

AIRCRAFT

P101DPS in Tomcat - Preliminary test results p0082 482-15016
The impact of new guidance and control systems on military aircraft cockpit design [AGARD-CP-132] p0091 482-13048
Prediction of aerodynamic loads on aircrafts with external stores at transonic speeds p0101 482-13813
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>AIRCRAFT ACCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight characteristics design and development of the B-52/KN 6017 helicopter</td>
<td>p0248 A62-18150</td>
</tr>
<tr>
<td>The effect of fuel composition on groundfall from aircraft fuel jetting</td>
<td>p0248 A62-18150</td>
</tr>
<tr>
<td>Fuel system design and development methods</td>
<td>p0321 A62-21424</td>
</tr>
<tr>
<td>High-altitude imagery user guide</td>
<td>p0533 A62-22903</td>
</tr>
<tr>
<td>A RAY survey of weather radar equipment</td>
<td>p0562 A62-30608</td>
</tr>
<tr>
<td>Replacement of aboard naval aircraft</td>
<td>p0562 A62-30606</td>
</tr>
<tr>
<td>AIRCRAFT ACCIDENT INVESTIGATION</td>
<td>p0590 A62-32356</td>
</tr>
<tr>
<td>Damage and microbursts: An aviation hazard</td>
<td>A note on fatal aircraft accidents involving metal fatigue</td>
</tr>
<tr>
<td>Airborne weather radar and severe weather penetration</td>
<td>p0063 A62-10219</td>
</tr>
<tr>
<td>A note on fatal aircraft accidents involving metal fatigue</td>
<td>p0114 A62-11400</td>
</tr>
<tr>
<td>Extended time radar raw video recording</td>
<td>p0075 A62-19097</td>
</tr>
<tr>
<td>A matter of seconds - A critical account of three notable air disasters /5th Major Miller Memorial Lecture/</td>
<td>p0081 A62-15597</td>
</tr>
<tr>
<td>Modern aircraft accident investigation: equipment and techniques</td>
<td>p0113 A62-17419</td>
</tr>
<tr>
<td>Improving the crashworthiness of general aviation aircraft by crash injury investigations</td>
<td>p0258 A62-28476</td>
</tr>
<tr>
<td>The investigation of aircraft accidents and accidents - Some recent national and international developments</td>
<td>p0329 A62-29275</td>
</tr>
<tr>
<td>Aviation accident investigation - Functional and legal perspectives</td>
<td>p0377 A62-32059</td>
</tr>
<tr>
<td>Post analysis of aircraft accident environments</td>
<td>p0580 A62-95835</td>
</tr>
<tr>
<td>Investigation of severe lightning strike incidents to two USAF F-106A aircraft</td>
<td>p0086 A62-12052</td>
</tr>
<tr>
<td>Summary of Federal Aviation Administration responses to National Transportation Safety Board safety recommendations</td>
<td>p0094 A62-22656</td>
</tr>
<tr>
<td>Special investigation report. Search and rescue procedures and arming of emergency locator transmitter: Aircraft accident near Michigan City, Indiana, 7 December, 1980</td>
<td>p0108 A62-16056</td>
</tr>
<tr>
<td>Special investigation report. Search and rescue procedures and arming of emergency locator transmitter: Aircraft accident near Michigan City, Indiana, 7 December, 1980</td>
<td>p0108 A62-16056</td>
</tr>
<tr>
<td>Solid state crash survivable flight data recorders for mass investigation</td>
<td>p0401 A62-25173</td>
</tr>
<tr>
<td>Briefs of accidents involving gliders, U.S. general aviation, 1979</td>
<td>p0466 A62-27258</td>
</tr>
<tr>
<td>AIRCRAFT ACCIDENTS</td>
<td>AIRCRAFT COLLISIONS</td>
</tr>
<tr>
<td>Sometimes a matter of seconds - A critical account of three notable air disasters /5th Major Miller Memorial Lecture/</td>
<td>p0081 A62-15597</td>
</tr>
<tr>
<td>Why safety --- fuel conservation through aircraft safety</td>
<td>p0110 A62-17277</td>
</tr>
<tr>
<td>Aircraft prevention - A regulatory view</td>
<td>p0110 A62-17278</td>
</tr>
<tr>
<td>Estimate of human control over mid-air collisions</td>
<td>p0114 A62-17604</td>
</tr>
<tr>
<td>Airworthiness of helicopter transmissions</td>
<td>p0172 A62-20541</td>
</tr>
<tr>
<td>Operational air traffic in the Federal Republic of Germany</td>
<td>p0220 A62-23318</td>
</tr>
<tr>
<td>The toll of ILS-preventable aviation accidents</td>
<td>p0202 A62-25275</td>
</tr>
<tr>
<td>A survey of U.S. Army helicopter main and tail rotor blade obstacles</td>
<td>p0578 A62-26385</td>
</tr>
<tr>
<td>Analysis of aircraft dynamic behavior in a crash environment</td>
<td>p0339 A62-30161</td>
</tr>
<tr>
<td>Predicting the application of vicarious liability to fixed base operators - Still guesswork after all these years</td>
<td>p0377 A62-32056</td>
</tr>
<tr>
<td>Factors influencing settlement of personal injury and death claims in aircraft accident litigation</td>
<td>p0377 A62-32062</td>
</tr>
<tr>
<td>The DC-10 Chicago crash and the legality of SFAB 40</td>
<td>p0443 A62-37832</td>
</tr>
<tr>
<td>The recognition of airworthiness of aircraft - Comments to a remarkable judicial decision</td>
<td>p0444 A62-38025</td>
</tr>
<tr>
<td>Analysis of general aviation accidents using ATC radar records</td>
<td>p0467 A62-39091</td>
</tr>
<tr>
<td>Satellite localization of aircraft accidents - The Sarsat program</td>
<td>p0555 A62-44239</td>
</tr>
<tr>
<td>Improving aircarrier water survival</td>
<td>p0555 A62-44291</td>
</tr>
<tr>
<td>Heavy rain/wind shear accidents</td>
<td>p0580 A62-65825</td>
</tr>
<tr>
<td>Rasonic convective complexes and general aviation</td>
<td>p0580 A62-65832</td>
</tr>
<tr>
<td>The performance of warning systems in avoiding Controlled-Flight-Into-Terrain /CFIT/ accidents</td>
<td>p0582 A62-46255</td>
</tr>
<tr>
<td>Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)</td>
<td>p0132 A62-14072</td>
</tr>
<tr>
<td>The prevalence of visual deficiencies among 1979 general aviation accident aires</td>
<td>p0107 A62-16054</td>
</tr>
<tr>
<td>Test and evaluation of improved aircraft restraint systems</td>
<td>p0107 A62-16054</td>
</tr>
<tr>
<td>(AIR-105510)</td>
<td>p0113 A62-16071</td>
</tr>
<tr>
<td>An assessment of the crash fire hazard of liquid hydroses fueled aircraft</td>
<td>p0263 A62-19196</td>
</tr>
<tr>
<td>Aircraft collision avoidance systems</td>
<td>p0264 A62-19201</td>
</tr>
<tr>
<td>Transport aircraft accident dynamics</td>
<td>p0350 A62-22227</td>
</tr>
<tr>
<td>(NASA-CE-165560)</td>
<td>p0350 A62-22227</td>
</tr>
<tr>
<td>Technical approaches for measurement of human error</td>
<td>p0351 A62-22237</td>
</tr>
<tr>
<td>A theory of human error</td>
<td>p0352 A62-22249</td>
</tr>
<tr>
<td>(NASA-CE-166313)</td>
<td>p0352 A62-22250</td>
</tr>
<tr>
<td>Commercial jet transport crashworthiness</td>
<td>p0364 A62-23207</td>
</tr>
<tr>
<td>Aircraft crash dynamics</td>
<td>p0364 A62-23207</td>
</tr>
<tr>
<td>(NASA-CE-165851)</td>
<td>p0364 A62-23207</td>
</tr>
<tr>
<td>The effect of very heavy rain upon aircraft and its role in wind shear attributed accidents</td>
<td>p0401 A62-25179</td>
</tr>
</tbody>
</table>
| Update of the summary report of 1977-1978 task force on aircrew workload | A-31
SUBJECT INDEX

Requirements for independent and dependent parallel instrument approaches at reduced runway spacing  
[AD-A105673]  
Dynamic scheduling of runway operations  
[AD-A110777]  
Airfield and airspace capacity/delay policy analysis  
[AD-A68-26326]

AIRCRAFT BASINS
U AIRCRAFT AIRFLOWS  
U AIRCRAFT BATTERIES  
NT LEADING EDGE FLAPS  
NT TRAILING-EDGE FLAPS  
NT WING FLAPS

Correlation of wear with oxidation of carbon-carbon composites  
[AD-A5-26173]  
Dynamics of aircraft antiskid brake systems conducted at the Langley aircraft landing loads and traction facility  
[NASA-TF-19887]  
Tire tread temperatures during antiskid braking and cornering on a dry runway  
[NASA-TF-20007]  
Alert aircraft roll over checks  
[AD-A107456]  

AIRCRAFT CABINS
U AIRCRAFT COMPONENTS
AIRCRAFT CARRIERS

Aircraft carrier - Surface effect ship  
[NASA-PAPER 82-0080]  
Review of defense-related vertical and short takeoff and landing (V/STOL) aircraft programs (GRO-55-270)  
[AD-A108936]  
Investigation of crocked wedge catapult slot interaction; proposed corrective measures  
[AD-A106180]  
Descent-rate cues for carrier landings: Effects of display gain, display mouse and aircraft type  
[AD-A108801]  
Reports by Systems Technology, Inc., in support of carrier-landing research in the visual technology research simulator  
[AD-A112466]  
Initial F-18 carrier suitability testing  
[AD-A31-20752]  
Naval Air Systems Command /HAYAIR/ ATE program - Standardized ATE for the carrier environment  
[NASA-PAPER 81-2076]  

AIRCRAFT COMMUNICATION

A mathematical model of an over-sea airborne UHF radio link  
[AD-A111051]  
ANHC 429 digital data communications on the Boeing 757 and 767 commercial airliners  
[NASA 81-2267]  
An update of an integrated CNI system - TINS - Communication, Navigation, and Identification  
[AD-A101292]  
On-board communication for active-control transport aircraft  
[NASA 81-2321]  
Future directions in CNI integrated avionics  
[AD-A101292]  
The agile transversal filter - A flexible building block for IGSA - Integrated Communications, Navigation and Identification Avionics  
[AD-A101292]  
An analysis of antijam communication requirements in fading media  
[AD-A101292]  
Voice communications - The vital link  
[AD-A101292]  
Beyond the horizon coverage for air navigation/traffic control  
[AD-A101292]  
Loran-C NAV in mountainous areas  
[AD-A101292]  
Radiating elements for hemispherically scanned arrays - onboard aircraft for data links to satellites  
[AD-A101292]  

AIRCRAFT COMPONENTS

Aviation electronics /4th edition/ -- book  
[AD-A101292]  
Implementing aircraft identification schemes by public key cryptosystem  
[AD-A101292]  
Digital computer simulation of modern aeronautical digital communications systems  
[AD-A101292]  
New trends and concerns in the airliner radio equipment market  
[AD-A101292]  
Automation in the skies -- Automatic air traffic control  
[AD-A101292]  
Investigation of the effects of airborne installation factors on receiver interference  
[AD-A101292]  
FAA/PCC coordination procedures for FH broadcast stations  
[AD-A101292]  
A comparative study of narrowband vocoder algorithms in Air Force operational environments using the Diagnostic Rhyme Test  
[AD-A101292]  
Attack and on route avionics for in-weather operations  
[AD-A101292]  
Propagations problems associated with aircraft communications systems  
[AD-A101292]  
Airborne Flight Test System (AFTS)  
[AD-A101292]  
Transverse electric waves for VLF/LF communication between aircraft  
[AD-A101292]  

AIRCRAFT CABINS

Aircraft cabin air ozone contamination and compliance with regulations  
[AD-A101292]  
Flight demonstration of an integrated floor/fuel isolation system  
[AD-A101292]  
Experimental model analysis of the fuselage panels of an Aero Commander aircraft  
[NASA-CM-165750]  
A vapour cycle cabin cooling system for the Sea King NH.50 helicopter  
[AD-A105211]  
Preliminary thoughts on helicopter cabin noise prediction methods  
[AD-A101292]  
The measurement of the mobility of structures at acoustic frequencies  
[AD-A101292]  

AIRCRAFT INSTRUMENTS

Study of cabin noise control for twin engine general aviation aircraft  
[NASA-CM-165533]  
Reduction of structural vibration by a dynamic absorber -- helicopter cabins  
[AD-A101292]  
Analytical prediction of the interior noise for cylindrical models of aircraft fuselages for prescribed exterior noise fields. Phase 2: Models for sidewall trim, stiffened structures and cabin acoustic with floor partition  
[NASA-CM-165660]  
A research program to reduce interior noise on a general aviation airplane. Influence of depressurization and damping material on the noise reduction characteristics of flat and curved stiffened panels  
[AD-A101292]  
Experimental studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents  
[AD-A101292]  
Fireworthiness of transport aircraft interior systems  
[AD-A101292]  

[AD-A101292]  
Examination of aircraft interior emergency lighting in a postcard fire environment  
[AD-A101292]  

A-33
AIRCRAFT CONFIGURATIONS


AIRCRAFT CONFIGURATIONS

Analysis of advanced aircraft flying qualities through application of the Neal-Smith criterion [AIAA PAPER 81-1776] p0008 A82-10462

The Agusta A129 p0045 A82-13237

The F-16/79 test program [AIAA PAPER 81-2416] p0054 A82-13855

Navy performance modeling techniques [AIAA PAPER 81-2431] p0054 A82-13869

The Cosmos 9503 Crusader [AIAA PAPER 81-2440] p0055 A82-13876

Experience with high performance V/STOL fighter projects at NASA [AIAA PAPER 81-2614] p0107 A82-16901

A summary of jet-impingement studies at Mcdonnell Douglas Research Laboratories [AIAA PAPER 81-2613] p0107 A82-16904

V/STOL status from the engine technology viewpoint [AIAA PAPER 81-2648] p0155 A82-19205

Tactical flight moment balance through innovative configuration technology [AIAA PAPER 81-2615] p0155 A82-19204

Application of thrust vectoring for STOL [AIAA PAPER 81-2646] p0155 A82-19205

Sea based support aircraft alternatives [AIAA PAPER 81-2649] p0157 A82-19217

Control law development for a close-coupled canard, relaxed static stability fighter [AIAA PAPER 82-0180] p0164 A82-19784

Analysis of flight test measurements in ground effect [AIAA PAPER 82-20763] p0178 A82-20764

A study of the suitability of the all-fiberglass XV-11A aircraft for fuel efficient general aviation flight research [AIAA PAPER 82-20764] p0178 A82-20764

Transonic perturbation analysis of wing-fuselage-nacelle/pylon configurations with powered exhausts [AIAA PAPER 82-0255] p0184 A82-22077

Transparency development needs for military aircraft [AIAA PAPER 88-2430] p0225 A82-24302

Large scale model measurements of airframe noise using cross-correlation techniques [AIAA PAPER 88-24302] p0225 A82-24302


F-15 fighter abilities evaluated [AIAA PAPER 88-24302] p0225 A82-24302

Aerodynamics at the 1981 Le Bourget show p0332 A82-29592

An automated technique for improving model test/analysis correlation [AIAA PAPER 82-0640] p0337 A82-30137

Multibody transport concept [AIAA PAPER 82-0910] p0376 A82-31983

Wind-tunnel wall interference corrections for three-dimensional flows [AIAA PAPER 82-23847] p0379 A82-32847

Generation of three-dimensional boundary-fitted curvilinear coordinate systems for wing/wing-tip geometries using the elliptic solver method [AIAA PAPER 82-0640] p0381 A82-33318

Status of the national transonic facility [AIAA PAPER 82-0640] p0381 A82-33326

Vertical takeoff technology - Flight mechanics, aerodynamics, and propulsion systems [NASA book] p0381 A82-33348


CDS grows new muscles p0384 A82-33891

Unstructure - A new concept for light weight integrally stiffened skin structure p0389 A82-34486

Flow visualization techniques for the study of high incidence aerodynamics [AERIA, TP No. 1982-5] p0389 A82-34493

Comparison of aerodynamic characteristics of aircraft models with forward and aft swept wings at Mach number 0.5 [AERIA, TP No. 1982-5] p0389 A82-34494

[CONRA, TP No. 1982-9] p0389 A82-34497

Aircraft configurations system requirements for advanced fighter aircraft [AIAA PAPER 82-1143] p0417 A82-35025

CMB technology on propulsion installation design - Forecast for the 80's --- computational fluid dynamics in aerospace applications [AIAA PAPER 82-07-21] p0420 A82-35289

NASA research in aircraft propulsion [AIAA PAPER 82-07-177] p0426 A82-35389

Extension of FLO codes to transonic flow prediction for fighter configurations [AIAA PAPER 82-1556] p0431 A82-35564

Applied computational transonic - Capabilities and limitations [AIAA PAPER 82-1556] p0432 A82-35564

Evaluation of full potential flow methods for the design and analysis of transport wings [AIAA PAPER 82-1556] p0432 A82-35567

A grid interfacing zonal algorithms for three-dimensional transonic flows about aircraft configurations [AIAA PAPER 82-1017] p0437 A82-37477

Advanced nozzle integration for air combat fighter application [AIAA PAPER 82-1135] p0439 A82-37694

High angle-of-attack characteristics of a forward-swept wing fighter configuration [AIAA PAPER 82-1322] p0407 A82-39099

Stabilized, L. Stephenson --- RV performance, design and materials characteristics [AIAA PAPER 82-1366] p0493 A82-39733

Summary of sting interference effects for cone, missile, and aircraft configurations as determined by dynamic and static measurements [AIAA PAPER 82-1366] p0497 A82-40395

An evaluation of vertical drag and ground effect using the BSHA rotor balance system --- Rotor Systems Research Aircraft p0498 A82-40510

The TH-64 empennage and tail rotor - A technical history p0500 A82-40528

Bagget augmentation effects p0502 A82-40548

Tail versus canard configuration - An aerodynamic comparison with regard to the suitability for future tactical combat aircraft [AIAA PAPER 82-1366] p0506 A82-40901

Assessment of advanced technologies for high performance single-engine business airplanes [AIAA PAPER 82-40932] p0508 A82-40932

Wind-tunnel testing of V/STOL configurations at high lift [AIAA PAPER 82-1366] p0510 A82-40949

Design integration of CCW/HEB for a sea-based aircraft [AIAA PAPER 82-1366] p0512 A82-40972

Performance characteristics of a buoyant quad-rotor research aircraft [AIAA PAPER 82-1366] p0513 A82-40970

CDS-the designer's media, the analyst's model --- Configuration Development System for aircraft design and materials characteristics [AIAA PAPER 82-1017] p0514 A82-40991

Aircraft geometry verification with enhanced computer-generated displays [AIAA PAPER 82-1017] p0514 A82-40991

An initial look at the supersonic aerodynamics of twin-fuselage aircraft concepts [AIAA PAPER 82-1017] p0516 A82-41008

Low-speed characteristics of a fighter-type configuration at high angles-of-attack and sideslip [AIAA PAPER 82-1017] p0517 A82-41020

A history of aerostatics and aviation in Russia - In the period up to 1914 /2nd revised and enlarged edition/ --- Russian book p0544 A82-42066

Applied flight mechanics in the design and in flight tests [AIAA PAPER 82-1017] p0550 A82-43327

Finite element approach to the calculation of unsteady aerodynamic influence coefficients in dynamic aeroelastic analysis [AIAA PAPER 82-1017] p0581 A82-45849

V/STOL aircraft and fluid dynamics [NASA-TP-81328] p0026 A82-10029

Volume 1: Physical description [AIAA PAPER 82-0640] p0337 A82-30137

A-34
A study of the suitability of the all fiberglass IV-11A aircraft for fuel efficient general aviation flight research


Aircraft transparency design guide

D.A.C. One-Eleven flight deck glazing product improvement

Concorde glazing - 5 years of each 2 service

Materials aspects of aircraft EEC design

Aircraft surface coatings for drag reduction/erosion protection

SAE PAPER 811070

Structural testing of composites with known defects

Carbon-fiber composites - a fiber composite material for highly stressed light-construction components

Recent developments in materials and processes for aircraft corrosion control

Materials and aeronautics

Sikorsky tail rotor - 1980: Advanced manufacturing and quality control techniques

CR-97 fiberglass rotor blade design and fabrication

Effects of lightning and nuclear electromagnetic pulse on an advanced composites aircraft

Application of advanced composite materials to helicopter airframe structures

Composite fasteners - a compatible joining technique for fibrous composites in structural design - aircraft construction materials

Flight service evaluation of advanced structures

Damage tolerance and durability design of composite structures for commercial aircraft

Light weight adhesive joining of composite structures

An evaluation of several polymers for high density humidity PC coatings

Recent developments in materials and processes for aircraft corrosion control

Processing and uses of carbon fibre reinforced plastics - An quick

Elevator unit for the Alpha-Jet, made from carbon-fibre reinforced plastic

Tool use in cutting operations involving integral structural components in aircraft construction

Advanced aluminum and titanium structures:


A review of U.S. Air Force research related to airframe and engine materials

Flight qualification of composite structures at ADB-DA

A giant step toward composite helicopters

New materials fly better and cheaper

System study of application of composite materials for future transport aircraft

The superalloys - materials for gas turbine hot section components

CAB AIAA PAPBB 82-05959


Aircraft transparency design guide

D.A.C. One-Eleven flight deck glazing product improvement

Concorde glazing - 5 years of each 2 service

Materials aspects of aircraft EEC design

Aircraft surface coatings for drag reduction/erosion protection

SAE PAPER 811070

Structural testing of composites with known defects

Carbon-fiber composites - a fiber composite material for highly stressed light-construction components

Recent developments in materials and processes for aircraft corrosion control

Materials and aeronautics

Sikorsky tail rotor - 1980: Advanced manufacturing and quality control techniques

CR-97 fiberglass rotor blade design and fabrication

Effects of lightning and nuclear electromagnetic pulse on an advanced composites aircraft

Application of advanced composite materials to helicopter airframe structures

Composite fasteners - a compatible joining technique for fibrous composites in structural design - aircraft construction materials

Flight service evaluation of advanced structures

Damage tolerance and durability design of composite structures for commercial aircraft

Light weight adhesive joining of composite structures

An evaluation of several polymers for high density humidity PC coatings

Recent developments in materials and processes for aircraft corrosion control

Processing and uses of carbon fibre reinforced plastics - An quick

Elevator unit for the Alpha-Jet, made from carbon-fibre reinforced plastic

Tool use in cutting operations involving integral structural components in aircraft construction

Advanced aluminum and titanium structures:


A review of U.S. Air Force research related to airframe and engine materials

Flight qualification of composite structures at ADB-DA

A giant step toward composite helicopters

New materials fly better and cheaper

System study of application of composite materials for future transport aircraft

The superalloys - materials for gas turbine hot section components

CAB AIAA PAPBB 82-05959
A review and assessment of fatigue crack growth rate relationships for metallic airframe materials p0391 A82-34879
A laboratory mock-up ultrasonic inspection system for composite Force aircraft p0419 A82-35256
Material and process impact on aircraft engine designs of the 1990's [ASME PAPER 82-GT-278] p0429 A82-35453
The direct effects of lightning on aircraft p0432 A82-35730
Evaluation criteria for engine materials p0436 A82-36085
Fabrication and test of integrally stiffened graphite/epoxy components p0435 A82-37071
Composite use on helicopters p0481 A82-38222
Toward all-composite helicopter fuselage p0481 A82-38223
Committing composites to the Boeing 767 p0481 A82-38224
The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades p0481 A82-39263
The technological aspects of titanium application in the F-114 aircraft structure p0492 A82-39718
Stability. R. Stephenson - BPV performance, design and materials characteristics p0493 A82-39733
The national dynamics 'observer' mini-BPV for tropical operation p0493 A82-39734
On the state of technology and trends in composite materials in the United States p0495 A82-39882
Tests of CFRP spar/rib models with corrugated web p0495 A82-39880
Evaluation of CFRP prototype structures for aircraft p0495 A82-39892
Developments on graphite/epoxy T-2 nose landing gear door p0495 A82-39893
Fabrication of CFRP prototype structure for aircraft horizontal tail leading edge slab rail p0495 A82-39896
Development status of a composite vertical stabilizer for a jet trainer p0496 A82-39897
In-plane shear test of thin panels p0502 A82-40595
A summary of weight savings data for composite VSTOL structure p0502 A82-40596
Material and process developments on the Boeing 767 p0506 A82-40992
The promise of laminated metals in aircraft design p0506 A82-40993
Material identification for the design of composite rotary wings p0509 A82-40937
Application of a new hybrid material /4B4LL/ in aircraft structures p0513 A82-40975
Design and fabrication of cored composite hat-stiffened panels p0513 A82-40976
Technical and economic comparison of carbon fiber tape and woven fabric applications p0514 A82-40993
Application of composite materials and new design concepts for future transport aircraft p0515 A82-40994
Composite structures repair p0517 A82-41015
Monopole antenna patterns on finite size composite ground planes - - in aircraft p0518 A82-41055
A supersonic V/STOL fighter design project p0546 A82-42545
Aerospace applications of composites p0547 A82-42675
Moisture gradient considerations in environmental fatigue of CFRP p0578 A82-45479
 Honeycomb cored structures - - Russian book on aircraft construction materials p0578 A82-45775

A-36
A design criterion for highly augmented fly-by-wire aircraft

The use of differential pressure feedback in an automatic flight control system

The ideal controlled element for real airplanes is not R/ss

An alternate method of specifying bandwidth for flying qualities

Investigation of low order lateral directional transfer function models for augmented aircraft

An analysis of a nonlinear instability in the implementation of a V/STOL control system during hover

X-29 flight control system design experiences

The effects of atmospheric turbulence on a quadrotor heavy lift aircraft

Flight control synthesis using robust output observers

Parameter estimation applied to general aviation aircraft - A case study

Flight dynamics of rotorcraft in steep high-g turns

Guidance for the use of equivalent systems with MIL-F-7085C for aircraft flight control systems

A modern approach to pilot/vehicle analysis and the Neal-Smith criteria

Electronic stabilization of an aircraft

Optimal control application in supersonic aircraft performance

Flying qualities requirements for roll CAS systems development

Terrain following/terrain avoidance system concept

Flight experience with a backup flight-control system for the NASA research vehicle

Optimal open-loop aircraft control for go-around maneuvers under wind shear influence

Wind tunnel measurements of longitudinal stability and control characteristics of primary and secondary wing configurations

Laser pointing in a turbulent atmosphere

The testing of new technologies with the aid of the Alpha Jet aircraft

Theoretical and experimental investigation of some nonlinear characteristics of electrohydraulic servovalves — German thesis

Use of EVFLR in-flight simulator MFB 320 Bans for handling qualities investigations

Self-tuning regulator design for adaptive control of aircraft wing/store flutter

Theoretical investigation of the influence of spoiler dynamics on the handling qualities of an aircraft with direct lift control

Estimation of airplane stability and control derivatives from large amplitude longitudinal maneuvers

Reliability analysis of the F-8 digital fly-by-wire system

Fixed gain controller design for aircraft (AF-A10477)

A standard control display utility for multi-aircraft application

NASA aviation safety reporting system

An observer approach to the identification and isolation of sensor failures in flight control systems

Role of optical computers in aeronautical control applications

Multivariable aircraft control by maneuver commands: An application to air to surface gunnery

Transport aircraft cockpit standardization (Federal Aviation regulations part 25) for aircraft with independent control of six degrees of freedom: Analysis and flight test

Multivariable closed loop control analysis and synthesis for complex flight systems

Integration of avionics and advanced control technology

Enhanced piloting control through cockpit facilities and A.C.I.

State of the art and recent perspectives on the study of the loss of control and spin

Aeroelastic tailoring for control and performance: Are requirements compatible?

Tail configurations for highly maneuverable combat aircraft

Analysis of rotary balance data for the F-15 airplane including the effect of conformal fuel tanks

Effects of cable geometry and aircraft attitude on the accuracy of a magnetic leader cable system for aircraft guidance during rollout and turnoff

An electronic control for an electrohydraulic active control landing gear for the F-4 aircraft

Control law design to meet constraints using SIMULAC-synthesis package for active controls

An analysis of a nonlinear instability in the implementation of a V/STOL control system

State-of-the-art cockpit design for the HH-65A helicopters
Performance evaluation of a manostatic-tactile display
p0366 N82-23221
Synthesis of an integrated cockpit management system
p0366 N82-23222
Cockpit integration from a pilot's point of view
p0366 N82-23220
NASA/AAA Advanced Rotorcraft Technology and Tilt Eotor Workshop, Volume 7: Tilt Eotor Session
[NASA-TM-87063] p0366 N82-23224
ACTTA: Investigation of new piloting and flight control technologies, Volume 1: Review; active wing
[88-DH-05-81-VO1-1] p0369 N82-23252
ACTTA: Investigation of new piloting and flight control technologies, Volume 2: Aircraft with reduced lateral stability
[88-DH-05-81-V01-2] p0370 N82-23253
F-15 rotary balance range of an angle-of-attack
range of 8 deg to 90 deg
p0392 N82-24160
Rotary balance data for an F-15 model with
conformal fuel tanks for an angle-of-attack
range of 8 deg to 90 deg
[NASA-CR-3516] p0392 N82-24169
Prediction of aircraft handling qualities using
analytical models of the human pilot
[NASA-TH-84223] p0396 N82-24208
Leading edge flap system for aircraft control
augmentation
[NASA-CASE-LAR-12761-1] p0407 N82-25240
Guidance and control/ACEE
[NASA-FACRO-02-80-88] p0409 N82-25261
Barriers and dispersal systems in minimum-time
interception
[NASA-TH-84351] p0409 N82-25262
Roll response criteria for transport aircraft with
advanced flight control system in the landing
approach and touchdowns
[MLB-TH-80103-0] p0410 N82-25265
Conceptual design study for an advanced cab and
visual system, Volume 1
[NASA-CR-166235] p0410 N82-25266
Conceptual design study for an advanced cab and
visual system, Volume 2
[NASA-CR-166236] p0410 N82-25267
Magnetic hours reference
[NASA-CASE-LAR-12639-1] p0444 N82-26260
Winged stator aircraft control system
[NASA-CASE-LAR-12639-1] p0451 N82-26278
Control optimization, stabilization, and computer
algorithms for aircraft applications
[NASA-CR-166004] p0461 N82-27009
A study of wind shear effects on aircraft
operations and safety in Australia
[ABL-SEPT-8924] p0522 N82-28265
Evaluations of helicopter instrument-flight
handling qualities
[AD-8110006] p0524 N82-28285
Analytical and simulator study of advanced transport
[NASA-CR-35003] p0526 N82-28298
Manual reversion flight control system for A-10
aircraft: Pilot performance and simulator cue
effects
[AD-8113163] p0526 N82-28302
Stability and control of the Gooseman human
powered aircraft by analysis and flight test
[NASA-CR-163119] p0557 N82-30289
Effects of higher order control systems on
aircraft approach and landing longitudinal
handling qualities
p0563 N82-30348
Pilot opinions of sampling effects on lateral
directional control
p0563 N82-30349
Evaluation of a trajectory command concept for
manual control of carrier approaches and landings
p0563 N82-30856
The Maneuverable Atmospheric Probe (MAP), a
remotely piloted vehicle
[AD-111611] p0569 N82-31323
Singular perturbation techniques for real time
aircraft trajectory optimization and control
[NASA-CR-16397] p0570 N82-31330
Multilevel semantic analysis and problem-solving
in the flight domain
[NASA-CR-16392] p0573 N82-31967
Active control technology in aircraft
p0585 N82-32303
Reflections on P-43 in flight emergency
(AD-1116873)
p0605 N82-33358
AIRCRAFT DESIGN
ST HELICOPTER DESIGN
Integration of computer graphics design with
analytical models — for aircraft design
[AIAA 81-2119] p0001 N82-10096
Use of Space Shuttle technology in conventional
aircraft
[AIAA 81-2176] p0002 N82-10125
Design aspects of non rigid airship envelopes
p0005 N82-10306
Some possibilities for composite light aircraft
construction
p0005 N82-10307
Light aircraft structural design in non-metallics
- Use of composite honeycomb for light aircraft
p0005 N82-10308
Analytical determination of undercarriage
retraction kinematics
p0005 N82-10309
The balloon and the airship technological heritage
[AIAA PAPER 81-1912] p0006 N82-10461
Air bag impact attenuation systems for the AH-34v
remote piloted vehicle
[AIAA PAPER 81-1917] p0006 N82-10463
Analysis of augmented aircraft flying qualities
through application of the Heal-Smith criterion
[AIAA PAPER 81-1776] p0008 N82-10462
How large should a computer transport be?
[AIAA 81-1732] p0008 N82-10463
Optimization of the principal design parameters of
a passenger aircraft
p0110 N82-10816
Towards minimum power for environmental control in
transport aircraft
[ASAE PAPER 81-EMAS-4] p0111 N82-10892
Design analysis of high temperature transparent
windshields for high performance aircraft
[ASAE PAPER 81-EMAS-5] p0111 N82-10893
Calculation of aerodynamic characteristics of jet
flapped airplane
p0114 N82-11459
Design and development of a low cost servovalve rate
gyro for unmanned aircraft
p0116 N82-11532
Response of nonlinear aircraft structural panels to
high intensity noise
p0118 N82-12041
Crack growth evaluation of a method to convert
real-time loads history to a simplified
engineering spectra --- for aircraft structural
analysis
p0118 N82-12043
ACHA - Fact or fantasy --- Advanced
Civilian/Military Aircraft
p0119 N82-12068
P-56 Tanager
p0224 N82-12775
The case for a defensive air-to-air fighter
p0224 N82-12601
Solution to the hidden-line problem
p0224 N82-12603
The application of large screen CRT's, touch
crinals, and voice to the flight stations of the
1990's
[AIAA 81-2263] p0448 N82-13042
Light-guided information distribution systems
[AIAA 81-2320] p0551 N82-13519
Thunderstrom hazards flight research — Program
overview
[AIAA PAPER 81-2412] p0553 N82-13585
Light aerodynamic design and flight test
experiences
[AIAA PAPER 81-2433] p0555 N82-13871
The Zeus 353 Crusader
[AIAA PAPER 81-2440] p0555 N82-13876
Fleet flight Loads Survey monitoring and analysis
techniques
[AIAA PAPER 81-2461] p0557 N82-13903
Power-lift STOL aircraft shipboard operations —
A comparison of simulation, land-based and sea
trial results for the GBAA — Gulf Short-haul
Research aircraft
[AIAA PAPER 81-2480] p0559 N82-13938
Flight test concept evolution
[AIAA PAPER 81-2375] p0559 N82-13946
Trim tab excitation system for the B-146
p0662 N82-13636
A-39
AIRCRAFT DESIGN COSTS

Damage tolerance and durability design of composite structures for commercial aircraft p0291 A82-27403
Why twin-fuselage aircraft p0296 A82-28276
Very large vehicles - Technology looking for a need p0295 A82-28278
US Navy begins slow shuffle towards V/STOL p0296 A82-28311
Development of a homebuilt powered sailplane p0330 A82-29416
NASA research related to sailplane airfoils p0330 A82-29417
The utilization of agricultural aircraft in economical operations for fighting forest fires in Israel p0331 A82-29580
The use of 'water bombers' and chemical agents against forest fires, taking into account the employment of a first-attack system p0331 A82-29582
The employment of two-engine and four-engine aircraft for dropping the latest chemical fire extinguishing agents in connection with the fighting of forest fires p0331 A82-29583
Adaptation and equipment of aircraft for the fighting of forest fires p0331 A82-29584
Computational aerodynamics - Its coming of age and its future p0332 A82-29773
Aerodynamics at the 1981 Le Bourget show p0332 A82-29799
Comparison of light aircraft with struttered and cantilever wings p0333 A82-29828
Design principles of a computer-aided design system p0333 A82-29829
Investigation of the aerodynamic-contour method with control functions in the form of smooth constant-sign contours p0333 A82-29831
Flight simulators p0334 A82-29924
Finite element analysis of the canopy emergency crew escape from the T-38 aircraft [AIAA 82-0705] p0335 A82-30096
737 graphite-epoxy horizontal stabilizer certification [AIAA 82-0745] p0336 A82-30109
Flight qualification of composite structures at ABD [AIAA 82-0755] p0336 A82-30116
Banded aluminum honeycomb - Aircraft flight surface primary structure application [AIAA 82-0676] p0338 A82-30145
Analysis of aircraft dynamic behavior in a crash environment [AIAA 82-0696] p0339 A82-30161
New materials fly better and cheaper p0342 A82-31426
The potential of large aircraft [AIAA PAPERS 82-0808] p0376 A82-31960
Multibody transport concept [AIAA PAPER 82-0910] p0376 A82-31983
Solar-powered airplane design for long-endurance, high-altitude flight [AIAA PAPER 82-0811] p0376 A82-31984
Very large aircraft with alternate fuels - A22 most promising [AIAA PAPER 82-0813] p0376 A82-31986
The potential for long-range high-payload aircraft with alternate fuels [AIAA PAPER 82-0814] p0376 A82-31987
Finite-element modeling of a fighter aircraft canopy acrylic panel p0379 A82-32048
Forward-swept wing technology p0381 A82-33309
Vertical takeoff technology - Flight mechanics, aerodynamics, and propulsion systems --- German book p0381 A82-33348
Understanding aircraft structures --- Book p0382 A82-33625
CDS groen new nucleus p0384 A82-33991
IV-15 - Foretelling things to come p0385 A82-33914
X-wing and the Navy V/STOL initiative p0385 A82-33915
Military aircraft and international policy p0386 A82-34010
Commercial transport developments for the 1980's p0386 A82-34010
Military aircraft - The way ahead p0386 A82-34010
Solutions to the aviation fuel problem p0386 A82-34013
Aeromathical research and development [AIAA 82-0817] p0387 A82-34014
Technical trends in the civil aircraft and helicopter industry p0387 A82-34012
Military aircraft p0387 A82-34011
Business jets to agricultural aircraft - An overview of general aviation p0387 A82-34023
Structural optimization of a swept wing on the basis of the alleron efficiency condition p0388 A82-34045
Electro-hydraulic nose wheel steering of the Dornier 228 p0389 A82-34073
Model test and full scale checkout of dry-cooled jet ramp sound suppressors [AIAA 82-1239] p0418 A82-35079
Ultralight airplanes p0319 A82-35233
CFD technology for propulsion installation design - Forecast for the 80's --- computational fluid dynamics in aerospace applications [AIAA PAPER 82-GT-21] p0420 A82-35289
The influence of engine characteristics on patrol aircraft life cycle cost optimization [AIAA PAPER 82-GT-256] p0429 A82-35433
Cycle considerations for tactical fighters in the early 1980's [AIAA PAPER 82-GT-259] p0429 A82-35436
Practical aerodynamic problems - Military aircraft p0431 A82-35556
Transonic design using computational aerodynamics p0431 A82-35560
Application of computational methods to transonic wing-design p0431 A82-35561
A-7 transonic wing designs p0431 A82-35562
A significant role for composites in energy-efficient aircraft p0435 A82-37065
Investigation of subsonic nacelle performance improvement concept [AIAA PAPER 82-1042] p0437 A82-37676
Factors shaping conceptual design of rotary-wing aircraft p0437 A82-37686
Forward-swept wings add supersonic zip p0440 A82-37773
Mirage 2000 - Towards possible high-speed production aircraft p0481 A82-38216
JTI, what an opportunity --- Joint Services Advanced Vertical Lift Aircraft Program [AIAA 82-0820] p0482 A82-38423
Aerodynamic characteristics of a large-scale, twin-tail-nacelle V/STOL model [AIAA PAPER 81-0150] p0482 A82-38443
The use of small strakes to reduce interference drag of a low wing, twin engine airplane [AIAA PAPER 82-1232] p0467 A82-39100
Use of rotary balance and forced oscillation test data in six degrees of freedom simulation [AIAA PAPER 82-1364] p0469 A82-39129
Remotely piloted vehicles; International Conference, 2nd, Reventon, England, April 6-9, 1981, Conference Papers and Supplementary Papers p0492 A82-39727
Horses for courses in BPV operations system p0296 182-28278
Horses for courses in BPV operations system p0296 182-28317
Horses for courses in BPV operations system p0296 182-28318
Horses for courses in BPV operations system p0296 182-28319
Horses for courses in BPV operations system p0296 182-28320
Horses for courses in BPV operations system p0296 182-28321
Horses for courses in BPV operations system p0296 182-28322
Horses for courses in BPV operations system p0296 182-28323
Horses for courses in BPV operations system p0296 182-28324
Investigation on rotating ailerons

Supersonic cruise/transonic maneuver wing section development study

[AD-A1106885] p043 A82-26162

Tanker Aeronaut/Aircrew Component Evaluation (TACE): Phase I: Simulation evaluation. Volume 2: Crew system design

[AD-A1109543] p054 A82-26291

Preplanned product improvement and other aircraft modifications programs

[AD-A1135994] p0463 A82-271220

Characterization of future aircraft impacting aircraft and airport compatibility

[NASA-TE-84476] p0463 A82-27323

The determination of gust loads on nonlinear aircraft using a power spectral density approach

[NASA-TE-80123-0] p0526 A82-28303

Aircraft geometry verification with enhanced computer generated displays

[NASA-TE-84254] p0531 A82-29260

Automated optimum design of wing structures

Deterministic and probabilistic approaches

[NASA-TE-84975] p0535 A82-29317

NASA aerodynamics


Glob aircraft construction: The G 110 family

[NASA-TE-76001] p0558 A82-30303

Structures and Dynamics Davison research and technology plans, FY 1982

[NASA-TE-85009] p0561 A82-30566

Training aircraft design considerations based on the successful organization of perception in manual control

[NASA-TE-84804] p0563 A82-30840

Axisymmetric and non-axisymmetric exhaust jet induced effects on a V/STOL vehicle design. Part 2: Analysis of results

[NASA-CR-166365] p0566 A82-31301

Multibody aircraft study, volume 1

[NASA-CR-165829-VOL-1] p0588 A82-32346

Multibody aircraft study, volume 2


Application of an optimized winglet configuration to a new advanced commercial transport

[NASA-CR-159156] p0589 A82-32348

Integrated application of active controls (IAC) technology to an advanced subsonic transport project. Initial ACT configuration design study

[NASA-CR-33400] p0589 A82-32349

Integrated application of active controls (IAC) technology to an advanced supersonic transport project. Initial act configuration design study

[NASA-CR-159269] p0593 A82-32380

Integrated application of active controls (IAC) technology to an advanced supersonic transport project. Conceptual baseline configuration study

[NASA-CR-159280] p0593 A82-32381

Langley test highlights, 1981

[NASA-TE-84519] p0603 A82-33330

Review of programs in FSTOL technology

[NASA-TE-84236] p0603 A82-33334

Computational aerodynamics and design

[NASA-TE-84257] p0605 A82-33340

AIRCRAFT DETECTION

Inverse SAR and its application to aircraft classification

[ASRE PAPER 81-44615] p0754 A82-14071

Wide field of view laser beacon system for three-dimensional vehicle position measurement

[ASRE PAPER 81-4W/DSC-9] p0234 A82-24563

The boomer that radar cannot see

[ASRE PAPER 82-25074] p0274 A82-25074

A multifrequency adaptive radar for detection and identification of objects - Results on preliminary experiments on aircraft against a sea-clutter background

[ASRE PAPER 82-32979] p0379 A82-32979

Multiple aircraft tracking system for coordinated research missions

[ASRE PAPER 82-3569] p0433 A82-3569

Electric field detection and ranging of aircraft

[ASRE PAPER 82-37377] p0436 A82-37377

Implementing aircraft identification schemes by public key cryptosystems

[ASRE PAPER 82-37381] p0436 A82-37381

Passive aircraft location

[AIRCRAFT ENGINE] p0547 A82-24791

AIRCRAFT ENGINES

0 ACE ENGINE

ST HELICOPTER ENGINES

ST J-58 ENGINE

ST TP-34 ENGINE

ST VARIABLE CYLINDER ENGINES

Design considerations for duty cycle, life and reliability of small limited life engines

[AILA PAPER 81-1-1402] p0060 A82-10465

Air-fila cooling returns to range

[AILA PAPER 81-1E-BA15-8] p0011 A82-10896

One reason for the onset of high-frequency self-excited oscillations --- in combustion chambers of aircraft engines

[AILA PAPER 81-1E-BA14-9] p0014 A82-11448

Basic problem of aircraft gateturbine engine analytic design: II

[AILA PAPER 81-1E-BA14-9] p0014 A82-11463

Coupled fluid/structure response predictions for soft body impact of airfoil configurations --- ice and bird impact on aircraft engines

[AILA PAPER 81-1E-BA15-8] p0018 A82-12039

History of flight testing the L-1011 TriStar jet transport. I — Testing highlights since initial certification of the L-1011-1

[AILA PAPER 81-1E-BA15-8] p0019 A82-12049

Considerations and applications for the use of fluids in aerospace controls

[AILA PAPER 81-1E-BA15-8] p0019 A82-12067

The enhancement of heat exchange in channels /2nd revised and enlarged edition- --- Russian book

[AILA PAPER 81-1E-BA15-8] p0020 A82-12222

Validation studies of turbulence and combustion models for aircraft gas turbine combustors

[AILA PAPER 81-1E-BA15-8] p0020 A82-12267

Commercial EHS considerations for small gas turbine engines --- automated engine monitoring systems

[AILA PAPER 81-1E-BA15-8] p0020 A82-12449

Further application and development of an engine usage/life monitoring system for military services

[AILA PAPER 81-1E-BA15-8] p0020 A82-12450

Superclean superalloy powders by the rotating electrode process

[AILA PAPER 81-1E-BA15-8] p0021 A82-12496

Superalloy turbine components - which is the superior manufacturing process, as-HIP, HIP plus Incoloy, or 'extending' of exomium consolidated billet

[AILA PAPER 81-1E-BA15-8] p0021 A82-12497

Lineup of the K-series aircraft-derivative gas turbines

[AILA PAPER 81-1E-BA15-8] p0021 A82-12560

Creep and aero gas turbine design

[AILA PAPER 81-1E-BA15-8] p0043 A82-12967

Direct digital drive actuation

[AILA PAPER 81-2294] p050 A82-13505

Recent propulsion system flight tests at the NASA Dryden Flight Research Center

[AILA PAPER 81-2438] p055 A82-13874

Flight test method for the determination of reciprocating engine cooling requirements

[AILA PAPER 81-2846] p0555 A82-13876

Aircraft absorbers - Promise and practice --- sound attenuation

[AILA PAPER 81-2846] p0555 A82-13878

Impedance modeling of acoustic absorbing materials for aircraft engine applications

[AILA PAPER 81-2963] p0062 A82-14042

Conceptual design of an integrated power and avionics information system

[AILA PAPER 81-2963] p0062 A82-14083

60 kVA ADF permanent magnet VSCF starter generator system - A program overview --- Variable Speed Constant Frequency

[AILA PAPER 81-2963] p0072 A82-14788

High speed FOG containment study for VSCF system --- Permanent Magnet Generator for Variable Speed Constant Frequency applications

[AILA PAPER 81-2963] p0072 A82-14789

Study of the load-carrying capacity of aviation gas-turbine engines impellers under low-cycle loading at normal and high temperatures

[AILA PAPER 81-2963] p0081 A82-15482

The well tempered transport aircraft engine /The Sir Henry Royce Memorial Lecture/
AIRCRAFT ENGINE STUDEY CONTD

Optical tip clearance sensor for aircraft engine controls
[AIAA PAPER 82-1131] p0438 A82-37691
A cost modeling approach to engine optimization
[AIAA PAPER 82-1185] p0439 A82-37698
Strategic materials - Technological trends
[AIAA PAPER 82-37972
The national dynamics 'observer' mini-APV for tropical operation
[p0493 A82-39734
NASA research in supersonic propulsion - A decade of progress
[AIAA PAPER 82-1048] p0497 A82-40417
Optimized 10 ton class commercial aircraft engine
Development of high performance single-engine business airplanes
[p0507 A82-40507
The nonsynchronous whirls of the turbine rotor in aerodynamic propulsion systems
Third generation turbo fans
[p0510 A82-40564
Design integration of CCM/USB for a sea-based aircraft
[p0512 A82-40972
The effect of intake flow disturbances on APU compressor blade high cycle fatigue in the Air-3800
[p0513 A82-40983
Engine controls for the 1980s and 1990s
[p0543 A82-41686
The analysis of the thermal-mechanical stress conditions in axisymmetric rotating hot components of aircraft/gas turbine - German thesis
[p0544 A82-41914
Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion
[p0545 A82-42462
Mathematical models of rotor strength and optimization in computer-aided design
[p0548 A82-42894
Antioxidants for synthetic oils
[p0548 A82-42894
Piston engines for general aviation - Is the revolution really under way
[p0551 A82-43578
Why GE made a motenr d*aviation engines
[p0578 A82-45499
The technology of the assembly of engines for flight vehicles - Russian book
[p0578 A82-45765
The automation of processes for producing aircraft engines /2nd revised and enlarged edition/ - Russian book
[p0578 A82-45711
Optimization of dispatching discipline in queuing systems with limited queues
[p0582 A82-46607
Development of high loading, high efficiency axial flow turbine
[p0582 A82-47069
Propulsion study for Small Transport Aircraft Technology (STAT), Appendix B
[p0027 BB-10038
A new method of cooling turbine vanes
[p0034 BB-11027
Lightweight diesel engine designs for coaster type aircraft
[HASA-CR-165470Q] p0037 BB-11066
Development of variable propulsive systems for aircraft engines
[p0040 BB-11087
Integrated analysis of engine structure
[HASA-TH-82713] p0041 BB-11091
The use of metal finishing in aircraft fuel systems
[p0040 BB-12077
Aerodynamics of Power Plant Installation
[AGARD-CP-301] p0093 BB-12085
Integration of advanced exhaust nozzle
[p0096 BB-12075

SUBJECT INDEX

Belianility design study for a fault-tolerant Interim review of the Energy Efficient Engine /E3/
Charting propulsion's future - The AXES results Evaluation of a multivariable control design on an aero engine /aerospace design of aero engine materials Propellers come full circle prop-fan NASA ECI programs - Benefits to Pratt and Whitney Determination of antioxidant content in aviation oils using thin-layer chromatography

Development of high pressure compressor designs of the 1990's

Development of multivariable controllers for aircraft engine control

A-47

Selected advanced thrust vectoring concept for prop-fan propulsion systems
[AIAA PAPER 82-1129] p0417 A82-35023
A methodology for planning a cost effective engine development - For fighter aircraft
[AIAA PAPER 82-1140] A82-35024
The T404 development program - A new approach
[AIAA PAPER 82-1160] p0518 A82-35045
Development of engine operability
[AIAA PAPER 82-1191] A82-35046
T700 - Modern development test techniques, lessons learned and results
[AIAA PAPER 82-1193] A82-35048
Next generation trainer /NGT/ engine requirements - An application of lessons learned
[AIAA PAPER 82-1214] A82-35049
Characteristics of a side dump gas generator ramjet
[AIAA PAPER 82-1258] A82-35059
Ultra-lightweight airplane
[p0419 A82-35233
Dry friction damping mechanisms in an engine blade
[AIAA PAPER 82-1265] A82-35303
The influence of Coriolis forces on gyroscopic motion of spinning blades
[AIAA PAPER 82-127] A82-35308
HC and CO emission abatement via selective fuel injection
[AIAA PAPER 82-1276] A82-35310
A stage-by-stage dual-axial compression system modeling technique
[AIAA PAPER 82-1293] A82-35309
Aeropulsion research for the U.S. Army
[AIAA PAPER 82-1293] A82-35310
Acquisition of P, total/ high pressure compressor entrance profiles
[AIAA PAPER 82-1295] A82-35402
Advanced turboprop engines for long endurance naval patrol aircraft
[AIAA PAPER 82-1297] A82-35404
An approach to software for high integrity applications - In aircraft gas turbine engine control
[AIAA PAPER 82-1297] A82-35409
The influence of engine characteristics on patrol aircraft life cycle cost optimization
[AIAA PAPER 82-1297] A82-35430
Performance improvement features of General Electric turbine engines
[AIAA PAPER 82-1297] A82-35433
Interim review of the Energy Efficient Engine /E3/ Program
[AIAA PAPER 82-1297] A82-35447
NASA ECI program - Benefits to Pratt and Whitney engines
[AIAA PAPER 82-1297] A82-35468
Material and process impact on aircraft engine designs of the 1980's
[AIAA PAPER 82-1297] A82-35453
Technology advancements for energy efficient aircraft engines
[AIAA PAPER 82-1051] A82-35479
Propellers come full circle - prop-fan technology for aircraft fuel savings
[p0431 A82-35061
Evaluation criteria for aero engine materials - Russian book
[p0434 A82-36065
The powerplants of the Yak-40 and /a-15 aircraft
[p0434 A82-36947
Evaluation of a multivariable control design on a variable cycle engine simulation
[AIAA PAPER 82-1077] p0438 A82-37662
Reliability design study for a fault-tolerant electronic engine control
[AIAA PAPER 82-1129] p0438 A82-37669
Design concepts of an advanced propulsion monitoring system
[AIAA PAPER 82-1130] p0438 A82-37690

A-47
An acquisition and analysis system for dynamic tests of air inlets

A real time Pegasus propulsion system model for STSOL aircraft

A look into the future: The potential of the BB211 powerplant deterioration: Review of current situation and lessons learned

The influence of protective treatment on the mechanical properties of superalloy parts

The role of modern control theory in the design of controls for aircraft turbine engines

Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference

Further development of the test concept of the Test and evaluation of OF fiber optics for High temperature electronic requirements in Foreign object damage in naval aircraft engines Sensor failure detection system for the F100 Electric flight systems, overview

Maintenance posture for quick start Development of the automated AFAPL engine Advanced compressor components. Phase 1: 1978 to Advanced Low-Emissions Catalytic-Combustor Gas path analysis of commercial aircraft engines

Analytical investigation of nonevaporative stall Coatings in the aero gas turbine --- sprayed coatings

The testing and approval of aircraft engine mounted accessories --- subject to vibration

Engines for air transport aircraft fuel consumption

Telemetry in aero engine development --- from operating engines

Maintenance experience with civil aero engines

Summary results on performance testing of a turbocharged rotary combustion engine

Cost/benefit studies of advanced materials Propulsion/ACEB Gas path analysis of commercial aircraft engines

Introduction to the gas turbine sprayed coatings

The development of an experimental technique to provide accurate measurement of the installed drag of close coupled civil nozzle/airframe configurations, using a full scale model with turbine powered engine simulators

Preliminary results on performance testing of a turbocharged rotary combustion engine Establishment of an experimental technique to provide accurate measurement of the installed drag of close coupled civil nozzle/airframe configurations, using a full scale model with turbine powered engine simulators

Electric flight systems, overview

For maintenance experience with civil aero engines

An acquisition and analysis system for dynamic tests of air inlets

Preliminary results on performance testing of a turbocharged rotary combustion engine Establishment of an experimental technique to provide accurate measurement of the installed drag of close coupled civil nozzle/airframe configurations, using a full scale model with turbine powered engine simulators

Electric flight systems, overview

For maintenance experience with civil aero engines

An acquisition and analysis system for dynamic tests of air inlets

Preliminary results on performance testing of a turbocharged rotary combustion engine

Electric flight systems, overview

For maintenance experience with civil aero engines

The 400-Hertz constant-speed electrical generation systems

Electric ECS

Environmental Control Systems

Overview of Honeywell electromechanical actuation programs

Digital flight controls

Electric flight systems

Engine technology

Power systems

Electromechanical actuators

Digital flight controls

Electric flight systems integration

The 400-Hertz constant-speed electrical generation systems

Electric ECS

Environmental Control Systems

Overview of Honeywell electromechanical actuation programs

Digital flight controls

Electric flight systems

Engine technology

Power systems

Electromechanical actuators

Digital flight controls

Electric flight systems integration

Practical applications of fracture mechanics

An experimental study of the effects of an inlet flow conditioner on the noise of a low speed axial fan --- in an aircraft engine

FF 102 in-duct combustor noise measurements with a turbine nozzle, volume 1

FF 102 in-duct combustor noise measurements with a turbine nozzle, volume 2

FF 102 in-duct combustor noise measurements with a turbine nozzle, volume 3

FF 102 in-duct combustor noise measurements with a turbine nozzle, volume 1

FF 102 in-duct combustor noise measurements with a turbine nozzle, volume 2

FF 102 in-duct combustor noise measurements with a turbine nozzle, volume 3

Electro-mechanical actuators
AIRCRAFT FUEL SYSTEMS

SUBJECT INDEX

AIRCRAFT ELECTRIC SYSTEM DEVELOPMENT AND TEST FACILITIES
The cargo helicopter - a logistical vehicle
Cascade converter of dc voltage to ac voltage of higher frequency with voltage and frequency stabilization devices --- aircraft electric equipment
Adaptation and equipment of aircraft for the fighting of forest fires
F-15 fighter abilities evaluated
Aviation electronics /4th edition/ --- Book
High technology raises fighter force readiness
Aircraft potential variations in flight
[OMHA, TP No. 1962-11]
An automatic map reader suitable for use in helicopters
Analysis of an airplane windshift anti-icing system
[AAIA PAPER 82-12772]
Concept demonstration of automatic subsystem parameter monitoring --- military helicopter cockpit instrumentation
Support of the HH-65A - The impact of advanced technology of VTOL systems upon existing product support
Models for the motor state of VSCF aircraft electrical power system --- Variable Speed Constant Frequency
AirCraft radio communications equipment: Design and use --- Russian book
Repair-discard concepts in design

757 systems key to route flexibility
Air-air anticolision systems
[SEE PAPER 811764]
Low maintenance hydraulic accumulator
[AD-A103967]
Advanced aircraft electrical system control technology demonstrator. Phase I: Requirements analysis and conceptual design
[AD-A103922]
Threat Alert and Collision Avoidance System (TCAS)
Symposium
[AD-A105653]
Polyurethane foams for aircraft shock mounts. 3: Vibration damping by polyester foams
[AD-A104946]
Portable air driven variable speed fiber optic cable termination polisher
[AD-A104797]
Practical aspects of instrumentation system installation, volume 13
[NASA-TH-84067]
Optical Information Processing for Aerospace Applications
[NASA-SP-2207]
System for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FAC-11005-1]
Test and evaluation of Ut fiber optics for application for aircraft fire detector systems
[AD-A106519]
Built-in-test equipment requirements workshop. Workshop presentation
[AD-A107842]
Corrosion control test method for avionic components
[AD-A108061]
Corrosion in naval aircraft electronic systems
[AD-A107842]
Aircrew restraint and mobility test fixture
[AD-A108274]

 Generic Test Bed (GTB) aircraft
[AD-A110335]
Dynamic Environmental Qualification Techniques conference
[AGARD-CP-318]
Qualification of equipment for gasfire induced vibration
[AD-A110353]
Dynamic qualification testing of F-16 equipment
[AD-A110353]
Equipment vibration qualification for Harrier and Hawk aircraft
[AD-A110353]
Gasfire blast pressure predictions
[AD-A110353]
Development of a taped random vibration technique for acceptance testing
[AD-A110353]
Production Verification Testing (PVT) of guidance and control systems for high reliability
[AD-A110353]
A new all-purpose digital flight data recorder
[AD-A110353]
Design guide for aircraft hydraulic systems and components for use with chlorotrifluoroethylene nonflammable hydraulic fluids
[AD-A112007]
Opportunities to reduce the cost of some B-52 modifications
[AD-A113563]
A Loran-C prototype navigation receiver for general aviation
[AGARD-CP-306]
Impact of Advanced Avionics Technology and Ground Attack Weapon Systems
[AGARD-PP-16117]
A compendium of lightning effects on future aircraft electronic systems
[AD-A114117]
Feasibility study of a 270V dc flat cable aircraft electrical power distribution system
[AD-A114026]
Evaluation of a meteorological airborne pulse Doppler radar

[AD-A156860]

AIRCRAFT FUEL SYSTEMS

The design, construction, and performance of composite fuselage components for the Boeing 234 helicopter
Aircraft fire safety research with antismoking fuels - Status report
[AD-A103270]
Advanced fuel flowmeter for future naval aircraft
[AD-A104364]
Nonflammable hydraulic fluids and control systems for high reliability
[AD-A112097]
Gunfire blast pressure predictions
[AD-A113532]
The direct effects of lightning on aircraft fuel tanks
[AD-A114026]
Experimental study of external fuel vaporization
[ARSE PAPER 82-8272-35-12]
The direct effects of lightning on aircraft fuel tanks
[AD-A114026]
Application of numerical methods to the calculation of electostatic fields in aircraft fuel tanks
[AD-A103270]
Advanced fuel flowmeter for future naval aircraft
[AD-A104364]

EXPERIMENTAL STUDY OF FUEL VAPORIZATION

The use of metal finishing in aircraft fuel systems

APPLICATIONS

Doppler radar

STORAGE

The cargo helicopter - a logistical vehicle

ENERGY

Aircraft electric system development and test facilities
A SURVEY OF RECENT DEVELOPMENTS IN AVIATION FUELS, TURBINE PROPELLERS, AND AVIONICS

S. B. CHAPMAN

The development and application of the liquid hydrogen air vehicle concept for long-range high-payload aircraft is presented. The potential for a large aircraft transport mission with liquid hydrogen fuel is evaluated. The potential of large aircraft with alternate fuels is discussed. A methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases is described. The formation of benzpyrene during the combustion of aviation fuels is investigated. The potential for long-range high-payload aircraft with liquid hydrogen fuel is discussed.

Key words: Liquid hydrogen, alternate fuels, large aircraft, fuel combustion, benzpyrene formation.

1. INTRODUCTION

The development and application of liquid hydrogen as an alternate fuel for high-altitude aircraft is presented. The potential for a large aircraft transport mission with liquid hydrogen fuel is evaluated. The potential of large aircraft with alternate fuels is discussed. A methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases is described. The formation of benzpyrene during the combustion of aviation fuels is investigated. The potential for long-range high-payload aircraft with liquid hydrogen fuel is discussed.

2. LIQUID HYDROGEN AS AN ALTERNATE FUEL

The potential for liquid hydrogen as an alternate fuel for high-altitude aircraft is presented. The potential for a large aircraft transport mission with liquid hydrogen fuel is evaluated. The potential of large aircraft with alternate fuels is discussed. A methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases is described. The formation of benzpyrene during the combustion of aviation fuels is investigated. The potential for long-range high-payload aircraft with liquid hydrogen fuel is discussed.

3. CONCLUSIONS

The development and application of liquid hydrogen as an alternate fuel for high-altitude aircraft is presented. The potential for a large aircraft transport mission with liquid hydrogen fuel is evaluated. The potential of large aircraft with alternate fuels is discussed. A methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases is described. The formation of benzpyrene during the combustion of aviation fuels is investigated. The potential for long-range high-payload aircraft with liquid hydrogen fuel is discussed.
AIRCRAFT GUIDANCE

Characterization of an Experimental Refugee Broadened Specification (ERBS) aviation terrain fuel and IBE fuel blends.

Impact of advanced propeller technology on NASA-CM-15(41)

Fuel efficient flight profiles in an ATC flow management environment.

Digital detection and processing of laser beacon signals for aircraft collision hazard warning.

Commentary on facilities used in the development of a Sea Harrier all weather operations capability.

Development of an HLS lateral autoland system with automatic path definition.

Helical helicopter approaches with microwave landing system guidance.

Flight measurements of Area Navigation System performance using various combinations of ground aids and airborne sensors.

AIS flare low elevation angle guidance considerations.

A band spectral tracking for FR/GW altimeters.

An automatic map reader suitable for use in helicopters.

PCS - A commercial flight management computer system.

The control and guidance unit for MACHAV.

A terrain following system, an algorithm and a sensor.

Flight simulation studies on the feasibility of internally segmented approaches in an AIS environment.

A concept for AW-guidance of transport aircraft in the TMA --- Terminal Maneuvering Area.

Investigations concerning with shifting pilot activities to a higher hierarchical stage of flight control --- German thesis.

Image processing in tactical flight guidance.

Requirements for independent and dependent parallel instrument approaches at reduced runway spacings.

LSI vertical guidance and navigation for a STOL airplane landing on an elevated STGport.

Automation of on-board flightpath management.

Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS) Part 2: NAV/MLS transition problems for aircraft.

Effects of cable geometry and aircraft attitude on the accuracy of a magnetic leader cable system for aircraft guidance during rollout and Garoff.

Integrated navigation-TP/TA-system based on stored terrain data processing.

Optimal inertial navigation using terrain correlation: An attractive solution to the ground attack aircraft navigation problem.

The integration of multiple avionic sensors and technologies for future military helicopters.

Production Verification Testing (PVT) of guidance and control systems for high reliability.

Sun sensing guidance system for high altitude aircraft.

Guidance and control/ACBE.

Terrain following/terrain avoidance system concept development.

Aircraft hazards: Detection and display of wind shear and turbulence.

Wire strike protection.

Assessment methodology of the lightning threat to advanced aircraft.

Operational evaluation of thunderstorm penetration tent flights during project Storm Hazards '80.

A criterion for determining the causes of wind shear at Punta Basa, on the basis of statistical data from barograph records.

Simulation of phugoid excitation due to hazardous wind shear.

The influence of turbulence models on computer-simulated aircraft landing.

An analytical methodology to predict potential aircraft losses due to canopy birdstrikes.

The effects of hard orientation on load profile and damage level.

Lightning detection and ranging.

Sudden changes in wind velocity - Their effect on aircraft and means of reducing hazard.

Aircraft lightning protection.

Lightning strike incidents from aircraft atmospheric electricity interactions.

Airborne warning systems for natural and aircraft-initiated lightning.

The direct effects of lightning on aircraft.

The operation of aircraft and helicopters in difficult meteorological and environmental conditions.

Selected bibliography of NASA-MASA aircraft icing publications.

System safety program plan --- electromagnetic pulse testing of the A-7 aircraft.

Investigation of severe lightning strike incidents to two USAF F-106A aircraft.

Test and evaluation of UF fiber optics for application for aircraft fire detector systems.

An assessment of the crash fire hazard of liquid hydrogen fueled aircraft.

Anemometer study of vortex encounters by a two-engine, commercial, jet transport airplane.

Workshop on Mathematical Fire Modeling.

Safety (aviation material).

Full-scale flammability test data for validation of aircraft fire mathematical models.

Primary sewage treatment plant as a source of bird hazards at airport.

Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with
Corrosion tests with HIL-H-83282 and H1L-U-6083
Future of general and commuter aviation technology
Corrosion prevention measures used in the
Control methodology: Nondestructive testing in
The airplane manufacturer and meteorology in
The sporty game on wide body commercial
Aircraft BfiD in Europe - A perspective view
Beyond 2000 - The airlift challenge ahead
Considerations for international joint venture
Efficient use or working fluids in aviation
Experience during the development of the
Aircraft Instrumentation

A-53
AIRCRAFT LANDING

Subject Index

AIRCRAFT LANDING

[AI A PAPER 81-2367] p0060 A82-13969
A Microwave Ice Accretion Measurement Instrument - NIAKI
[AI A PAPER 82-0285] p0116 A82-17875
Radio-navigation equipment of aircraft - Design and operation --- Russian book
[AI A PAPER 82-16500] p0262 A82-16500
Simple vs. sophisticated TacAir avionics. II - Soviet TacAir avionics technology
Checking and calibrating varioimeters in place in the multiplane instrument panel
F-15 fighter abilities evaluated
Assembly of aircraft instruments --- Russian book
Instrument failure detection in partially observable systems
Evaluation of an automatic subsystem parameter monitor --- for aircraft
A miniature electro-optical air flow sensor
Integrated sensor system for flight test instrumentation
Maximum likelihood failure detection of aircraft flight control sensors
Index of National Aviation Facilities Experimental Center technical reports 1972 - 1977
Electronic Master Monitor and Advisory Display System (EMADS)
[AI A PAPER 82-12056] p0086 A82-12056
Advanced recorder design and development
Econometric considerations for real-time navaid aircraft/avionics distributed computer control systems
The multi mode matrix flat panel display: Technology and applications
Analytical study of cockpit information requirements [AD-A106524]
Integration of complex systems in current and future aircraft projects for the example of avionics
[BBN-ON-18-80-0] p0256 A82-18218
Transport aircraft cockpit standardization (Federal aviation regulations part 25)
[AD-A108924] p0264 A82-19207
RADAR simulator for aircraft instruments
[POA-C-63136-43] p0356 A82-22286
V/STOL tilt rotor research aircraft. Volume 1: General information, revision C
[NASA-C-166349] p0395 A82-24194
V/STOL tilt rotor research aircraft. Volume 2: Ship 1 instrumentation
[NASA-C-166348] p0395 A82-24195
V/STOL tilt rotor research aircraft. Volume 3: Ship 2 instrumentation
[NASA-C-166347] p0395 A82-24196
V/STOL tilt rotor research aircraft. Volume 4: CFM technical data
[NASA-C-166350] p0395 A82-24197
Improvement process for the C-141 Navigation Selector Panel
[AD-A111469] p0408 A82-25248
PIDD Programmable pilot-oriented display --- air navigation
[AI A PAPER 82-26201] p0445 A82-26201
Cockpit display of traffic information and the measurement of pilot workload: An annotated bibliography
[AD-A111437] p0470 A82-27291
Aircraft icing research at NASA
[NASA-TN-82919] p0558 A82-30297
Separation monitoring with four types of predictors on a cockpit display of traffic information
[AI A PAPER 82-30860] p0564 A82-30860

AIRCRAFT LANDING

NT CRASH LANDING

NT DITCHING (LANDING)

Barbour points in minimum-fuel aircraft landing problems
Joint Tactical Microwave Landing System /JMLS/ airborne signal processing
[AI A PAPER 81-2247] p0048 A82-13471
Applications of head-up displays in commercial transport aircraft
[AI A PAPER 81-2300] p0050 A82-13506
Digital signal processing on a background of cerebellar damage examples for the international aircraft landing system
[AI A PAPER 82-13703] p0053 A82-13703
Comparison of low-speed landing guidelines in ground-based and in-flight simulator tests
[AI A PAPER 81-2478] p0059 A82-13936
AN/SPS-25 and AN/SPS-22 precision approach radar
[AI A PAPER 82-14656] p0075 A82-14656
Flight investigations of integrated descent rate control systems
[AI A PAPER 82-14629] p0076 A82-14629
The influence of turbulence models on computer-simulated aircraft landing
[AI A PAPER 82-0342] p0119 A82-17896
An application of invariance principle to pilot model for 73-33 aircraft with variable coefficients and delays
[AI A PAPER 82-0367] p0120 A82-17907
Game-theoretical method for the synthesis of aircraft control during landing approach
[AI A PAPER 82-18054] p0177 A82-18054
STOL capability impact on advanced tactical aircraft design
[AI A PAPER 81-2617] p0155 A82-19206
Methodology for multiaircraft minimum noise impact landing trajectories
[AI A PAPER 82-23037] p0218 A82-23037
Oscillations and vibrations of aircraft on runways
[AI A PAPER 82-24974] p0241 A82-24974
The toll of ILS-preventable aviation accidents
[AI A PAPER 82-25325] p0242 A82-25325
The effects of weather on runway operations
[AI A PAPER 82-27050] p0265 A82-27050
The characteristics and detection of low level wind shear in the critical phases of flight
[AI A PAPER 82-28349] p0279 A82-28349
A documented example of strong wind-shear
[AI A PAPER 82-32274] p0360 A82-32274
In-Flight investigation of large airplane flying qualities for approach and landing
[AI A PAPER 82-1295] p0466 A82-39083
An ILS with computer aided landing approach
[AI A PAPER 82-1352] p0408 A82-39122
Instrument landing systems /ILS/ at airports of the German Democratic Republic
[AI A PAPER 82-39248] p0490 A82-39248
Touchdown technology --- large aircraft landing gear stress
[AI A PAPER 82-40057] p0496 A82-40057
Flying quality requirements for V/STOL transition
[AI A PAPER 82-1293] p0496 A82-40276
Visual scene simulation concerning the landing of sporting aircraft in connection with investigations regarding the control and learning behavior of the pilot --- German thesis
[AI A PAPER 82-41467] p0519 A82-41467
Requirements and possible design choices for improving the operation of aircraft in the terminal control area
[AI A PAPER 82-41601] p0544 A82-41601
The ILS in Category III operations --- ground-based support for French air routes
[SEE PAPER 811761] p0554 A82-46232
Wind determination and wind shear detection from flight test and airline flight data
[AI A PAPER 82-45815] p0579 A82-45815
Low level wind shear detection system for airport landing approach areas using the Betts Doppler acoustic sounder /55ad/:
[AI A PAPER 82-45816] p0579 A82-45816
A tower approach to slant visual range observation and prediction
[AI A PAPER 82-45818] p0579 A82-45818
The use of groundspeed, in wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed
[AD-A104756] p0087 A82-12060
The effect of visual information on manual approach and landing
A-54
### SUBJECT INDEX

**AIRCRAFT MANEUVERS**

<table>
<thead>
<tr>
<th>Title</th>
<th>p0336 A82-30119</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next generation trainer /BTC/ engine requirements - an application of lessons learned</td>
<td></td>
</tr>
<tr>
<td>(AIAA PAPE 82-1084)</td>
<td></td>
</tr>
<tr>
<td>Development and application of Babar gas gun tangsten arc welding for repair of aircraft engines, seal teeth</td>
<td>p0418 A82-35089</td>
</tr>
<tr>
<td>(AIAA PAPE 82-1189)</td>
<td></td>
</tr>
<tr>
<td>U.S. Marine Corps AV-8A maintenance experience</td>
<td>p0422 A82-35310</td>
</tr>
<tr>
<td>(AIAA PAPE 82-2065)</td>
<td></td>
</tr>
<tr>
<td>Rationalization of the maintenance process for helicopter Ka-26</td>
<td>p0490 A82-39246</td>
</tr>
<tr>
<td>Civil helicopter propulsion system reliability and engine monitoring technology assessments</td>
<td>p0499 A82-40518</td>
</tr>
<tr>
<td>Age exploration in naval aviation --- Reliability centered maintenance program</td>
<td>p0517 A82-40962</td>
</tr>
<tr>
<td>Composite structures repair</td>
<td></td>
</tr>
<tr>
<td>Principles of achieving damage tolerance with flexible maintenance programs for new and aging aircraft</td>
<td>p0517 A82-41015</td>
</tr>
<tr>
<td>Repair - discard concepts in design</td>
<td></td>
</tr>
<tr>
<td>F-16 Centralized Data System /CDS/</td>
<td>p0545 A82-41780</td>
</tr>
<tr>
<td>Computer Monitored Inspection Program /CHIP/, a key to increased aircraft and personnel productivity</td>
<td>p0545 A82-42210</td>
</tr>
<tr>
<td>Mathematical model for the maintenance program of modern jet aircraft --- crack detection, inspection intervals</td>
<td>p0545 A82-42217</td>
</tr>
<tr>
<td>Aircraft Corrosion</td>
<td></td>
</tr>
<tr>
<td>US Naval fleet aircraft corrosion</td>
<td>p0211 A82-17350</td>
</tr>
<tr>
<td>Detection and prevention of corrosion in Royal Air Force aircraft</td>
<td></td>
</tr>
<tr>
<td>An airline view of the corrosion problem</td>
<td>p0211 A82-17351</td>
</tr>
<tr>
<td>Some observations on the corrosion of aircraft at the air force base in Bandirmas, Turkey</td>
<td>p0211 A82-17352</td>
</tr>
<tr>
<td>The experience of corrosion on French military aerodynamics</td>
<td>p0211 A82-17353</td>
</tr>
<tr>
<td>Design and maintenance against corrosion of aircraft structures</td>
<td>p0211 A82-17355</td>
</tr>
<tr>
<td>Potential reductions in aircraft operation and maintenance costs by using thrust computing support equipment</td>
<td>p0254 A82-18207</td>
</tr>
<tr>
<td>(AD-1108463)</td>
<td></td>
</tr>
<tr>
<td>Military maintenance policies and procedures for high-temperature parts. Will they be adequate?</td>
<td>p0345 A82-22173</td>
</tr>
<tr>
<td>Engine depot maintenance repair technology</td>
<td></td>
</tr>
<tr>
<td>Maintenance experience with civil aero engines</td>
<td>p0345 A82-22174</td>
</tr>
<tr>
<td>Concept studies of an advanced composite helicopter fin</td>
<td></td>
</tr>
<tr>
<td>(SNIAS-82-1-210-106)</td>
<td>p0353 A82-22257</td>
</tr>
<tr>
<td>The Sortie-Generation Model system. Volume 2: Sortie-Generation Model user's guide</td>
<td>p0447 A82-26223</td>
</tr>
<tr>
<td>(AD-1108080)</td>
<td></td>
</tr>
<tr>
<td>The Sortie-Generation Model system. Volume 5: Maintenance subsystem</td>
<td></td>
</tr>
<tr>
<td>(AD-110815)</td>
<td></td>
</tr>
<tr>
<td>The Sortie-Generation Model system. Volume 6: Spares subsystem</td>
<td></td>
</tr>
<tr>
<td>(AD-110906)</td>
<td></td>
</tr>
<tr>
<td>Application of wear debris analysis to aircraft hydraulic system</td>
<td></td>
</tr>
<tr>
<td>(AD-1110559)</td>
<td></td>
</tr>
<tr>
<td>Maintenance support resource forecasting models. Volume 2: Equivalence testing of reliability and maintenance model and expected values model</td>
<td>p0558 A82-30305</td>
</tr>
<tr>
<td>(AD-1117149)</td>
<td></td>
</tr>
<tr>
<td>Mathematical model for a maintenance program for modern jet aircraft</td>
<td>p055s A82-32307</td>
</tr>
</tbody>
</table>

**AIRCRAFT BAHREMS**

<table>
<thead>
<tr>
<th>Title</th>
<th>p0565 A82-32308</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability and maintainability improvement program for the AV-8A/TAV-8A Harrier low-altitude/low-speed display set, development of the signal data converter, CT-3600/AVU-30(V), Volume 3</td>
<td></td>
</tr>
<tr>
<td>(AD-1115559)</td>
<td></td>
</tr>
<tr>
<td>Survey and update of F-14A mission profiles for TF30 engine usage</td>
<td>p0603 A82-33337</td>
</tr>
<tr>
<td>(AD-1116023)</td>
<td></td>
</tr>
<tr>
<td>Aircraft thrust/power management can save defense fuel, reduce engine maintenance costs and improve readiness</td>
<td></td>
</tr>
<tr>
<td>(AD-1117935)</td>
<td></td>
</tr>
<tr>
<td>Large terminal maneuvering areas: Operational problems - Possible development of solutions</td>
<td>p0701 A82-15625</td>
</tr>
<tr>
<td>An investigation of the use of a propulsive wing/canard concept for improved maneuvering</td>
<td>p0707 A82-16905</td>
</tr>
<tr>
<td>(AIAA PAPE 81-2622)</td>
<td></td>
</tr>
<tr>
<td>A binary matrix technique for aircraft collision threat recognition and avoidance</td>
<td>p0116 A82-17028</td>
</tr>
<tr>
<td>(AIAA PAPE 82-1084)</td>
<td></td>
</tr>
<tr>
<td>The feasibility of turnback from a low altitude engine failure during the takeoff climb-out phase</td>
<td>p0116 A82-17028</td>
</tr>
<tr>
<td>(AIAA PAPE 82-2104)</td>
<td></td>
</tr>
<tr>
<td>Maneuver dependent component error model and synchronized reset filters for inertial navigation systems</td>
<td>p0702 A82-18139</td>
</tr>
<tr>
<td>Analysis of data from a wind tunnel investigation of a large-scale model of a highly maneuverable supersonic V/STOL fighter - STO1 configuration</td>
<td>p0705 A82-18424</td>
</tr>
<tr>
<td>(AIAA PAPE 81-2620)</td>
<td></td>
</tr>
<tr>
<td>An analytical technique for the analysis of airplane spin entry and recovery</td>
<td>p0706 A82-19433</td>
</tr>
<tr>
<td>(AIAA PAPE 82-0406)</td>
<td></td>
</tr>
<tr>
<td>Simulate data test instrumentation - Flight test challenge of the eighties</td>
<td>p0708 A82-20768</td>
</tr>
<tr>
<td>Aerodynamic characteristics of maneuvering flaps</td>
<td></td>
</tr>
<tr>
<td>(AIAA PAPE 82-1519)</td>
<td></td>
</tr>
<tr>
<td>Utilizing the helicopter's versatility to improve the A/C system</td>
<td></td>
</tr>
<tr>
<td>Efficient combinations of numerical techniques applied to aircraft turning performance optimization</td>
<td>p0709 A82-22110</td>
</tr>
<tr>
<td>Aerial combat simulation in the U.S. Air Force</td>
<td></td>
</tr>
<tr>
<td>(AIAA PAPE 81-2614)</td>
<td></td>
</tr>
<tr>
<td>The stability of maneuverable flight vehicles</td>
<td></td>
</tr>
<tr>
<td>(AIAA PAPE 82-2627)</td>
<td></td>
</tr>
<tr>
<td>Development of a control law for the alleviation of maneuver loads on an elastic aircraft</td>
<td>p0800 A82-31444</td>
</tr>
<tr>
<td>(AIAA PAPE 82-2827)</td>
<td></td>
</tr>
<tr>
<td>Air-to-air missile avoidance</td>
<td></td>
</tr>
<tr>
<td>(AIAA PAPE 82-39139)</td>
<td></td>
</tr>
<tr>
<td>Pilot models for discrete maneuvers</td>
<td></td>
</tr>
<tr>
<td>(AIAA PAPE 82-1519)</td>
<td></td>
</tr>
<tr>
<td>Optimal three-dimensional turning performance of supersonic aircraft</td>
<td></td>
</tr>
</tbody>
</table>
AIRCRAFT MODELS

Modeling procedures for handling qualities evaluation of flexible aircraft

Aeroelasticity matters - Some reflections on two decades of testing in the NASA Langley Transonic Dynamics Tunnel

Jet V/STOL wind-tunnel simulation and groundplane effects

The use of frequency methods in rotorcraft system identification

Development of a comprehensive analysis for combat aircraft maneuverability

Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack

An X-ing aircraft control system concept

Validation of zero-order feedback strategies for medium range air-to-air interception in a horizontal plane

Simulator for air-to-air combat versus real world: Visual cue analysis for simulated air-to-air combat training

Supersonic cruise/transonic maneuver wing section development study

Performance deterioration due to acceptance testing and flight - aircraft engine diagnostic program

A mathematical model of a subsonic transport aircraft

The application of bifurcation theory to the study of loss of control over combat aircraft

Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack

Aerodynamics of a transport aircraft-type wing-fuselage assembly

An independent view of where civil simulation should be headed - training simulators for civil aircraft

Analysis of the crossed dipole antenna as a model for aircraft in an electromagnetic environment

Method for the measurement of elastic deformations of aircraft models in a wind tunnel

Development of a helicopter rotor/propulsion system dynamics analysis

Current techniques for jet engine test cell modeling

Aerodynamic characteristics of a large-scale, twin tilt-nacelle V/STOL model

An X-Wing aircraft control system concept

Investigation of low order lateral directional transfer function models for augmented aircraft

An estimation of aerodynamic forces and moments on an airplane model under steady state spin conditions

An investigation of scale model testing of V/STOL aircraft in hover

AIRCRAFT MODELS

Modeling procedures for handling qualities evaluation of flexible aircraft

Aeroelasticity matters - Some reflections on two decades of testing in the NASA Langley Transonic Dynamics Tunnel

Jet V/STOL wind-tunnel simulation and groundplane effects

The use of frequency methods in rotorcraft system identification

Development of a comprehensive analysis for combat aircraft maneuverability

Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack

An X-ing aircraft control system concept

Validation of zero-order feedback strategies for medium range air-to-air interception in a horizontal plane

Simulator for air-to-air combat versus real world: Visual cue analysis for simulated air-to-air combat training

Supersonic cruise/transonic maneuver wing section development study

Performance deterioration due to acceptance testing and flight - aircraft engine diagnostic program

A mathematical model of a subsonic transport aircraft

The application of bifurcation theory to the study of loss of control over combat aircraft

Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack

Aerodynamics of a transport aircraft-type wing-fuselage assembly

An independent view of where civil simulation should be headed - training simulators for civil aircraft

Analysis of the crossed dipole antenna as a model for aircraft in an electromagnetic environment

Method for the measurement of elastic deformations of aircraft models in a wind tunnel

Development of a helicopter rotor/propulsion system dynamics analysis

Current techniques for jet engine test cell modeling

Aerodynamic characteristics of a large-scale, twin tilt-nacelle V/STOL model

An X-Wing aircraft control system concept

Investigation of low order lateral directional transfer function models for augmented aircraft

An estimation of aerodynamic forces and moments on an airplane model under steady state spin conditions

An investigation of scale model testing of V/STOL aircraft in hover
Airbus Industrie and community noise
[ASA-CB-163672] p0530 862-28841
Estimated airplane noise levels in A-weighted
decibels
[AC-36-38] p0540 862-30029
Far-field acoustic data for the Texas A&M, Inc.
bush house
[AD-A145639] p0540 862-30032
HSA aeronautics
[ASA-HP-85] p0557 862-30263
Flow and pressure field of a model propeller
[HSA-TP-76690] p0577 862-30290
A study of general aviation community noise impact
and annoyance
[ASA-CB-165945] p0564 862-31066
Noise transmission loss of aircraft panels using
acoustic intensity methods
[ASA-TP-2046] p0564 862-31069
The noise impact of proposed runway alternatives
at Craig Airport
[ASA-TR-84503] p0574 862-32080
Aerosound from corner flow and flap flow
[ASA-TR-84503] p0574 862-32081
Helicopter noise definition report AB-60A, 5-76,
A-109, 206-L
[AD-A116363] p0574 862-32083
A description of methodologies used in estimation
of a-weighted sound levels for FAR Advisory
Circular 43-36-B
[AD-A116363] p0574 862-32084
Operational evaluation of a propeller test stand
in the quiet flow facility at Langley Research
Center
[ASA-TR-84523] p0600 862-33169
Evaluation of noise control technology and
alternative noise certification procedures for
propeller-driven small airplanes
[AD-A16495] p0600 862-33151
USAF Bioenvironmental Noise Data Handbook. Volume
1497; C-9A in-flight crew/passenger noise
[AD-A11645] p0601 862-33153
Executive summary of systems analysis to develop
future civil aircraft noise reduction alternatives
[AD-A16467] p0602 862-33162
Effects of filter response on analysis of aircraft
noise data
[AD-A16458] p0602 862-33167
Noise measurement in wind tunnels, workshop summary
[ASA-TR-84219] p0606 862-34108
Supersonic jet noise generated by large scale
installations
[BASA-TP-2072] p0614 862-34189
AIRCRAFT NOISE PREDICTION
U NOISE PREDICTION (AIRCRAFT)
AIRCRAFT PARTS
Implementation of AVCAD and TABS --- for military
aircraft parts production engineering
[AD-A162056] p0009 862-10545
Fatigue life of lugs under service loading - Test
results and predictions
[AD-A1621165] p0015 862-11685
In-flight computation of helicopter transmission
fatigue life expenditure
[AIAA PAPER 81-2434] p0055 862-13872
A method for locating aircraft wing damage by
nonlinear vibration analysis
[AD-A109.206-1] p0109 862-17116
A CAD/CAM graphics system with relative datums and
tolerances
[ASME PAPER 81-DEP-108] p0161 862-19333
The inter-relation between design, construction and
maintenance
[AD-A16224] p0240 862-24010
Lucas stretched acrylic
[AD-A162218] p0227 862-24318
The Aquta's solution of NASA's hypothetical
fatigue life problem
[AD-A1622470] p0230 862-24701
A method of determining safe service life for
helicopter components
[AD-A1622470] p0239 862-24709
Boeing Vertol fatigue life methodology
[AD-A1622478] p0200 862-24718
Advanced attack helicopter fatigue testing - Overview
[AD-A1622478] p0200 862-24720
Problems and options in advanced composite repair
[AD-A1622478] p0288 862-27185
Light weight adhesive joining of composite
structures
<table>
<thead>
<tr>
<th>Subject Index</th>
<th>AIAA Paper Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Performance</td>
<td>A-60</td>
</tr>
<tr>
<td>Aviation gear drives and reducers: Handbook --- in Russian</td>
<td>p0291 A82-27604</td>
</tr>
<tr>
<td>Aerodynamics. Part 2 - Methods of aerodynamics design /3rd revised and enlarged edition/ --- Russian book</td>
<td>p0341 A82-30675</td>
</tr>
<tr>
<td>Fatigue life prediction of helicopter pitch link using Rautman life calculation methods</td>
<td>p0382 A82-33387</td>
</tr>
<tr>
<td>Electro-hydraulic nose wheel steering of the Dornier 228</td>
<td>p0387 A82-34125</td>
</tr>
<tr>
<td>Geometrical aspects of the tribological properties of graphite-epoxy reinforced polyimide composites</td>
<td>p0399 A82-34373</td>
</tr>
<tr>
<td>The technological aspects of titanium application in the T9-M44 aircraft structure</td>
<td>p0492 A82-39718</td>
</tr>
<tr>
<td>IFR Operations performance characteristics --- system components design and development in terms of performance and cost</td>
<td>p0493 A82-39729</td>
</tr>
<tr>
<td>An analogy method for crack initiation life prediction</td>
<td>p0577 A82-405192</td>
</tr>
<tr>
<td>Engine/drive/airframe compatibility: A way of life</td>
<td>p0208 H82-17220</td>
</tr>
<tr>
<td>Corrosion prevention methods developed from direct experience with aircraft structures</td>
<td>p0212 H82-17359</td>
</tr>
<tr>
<td>Grob aircraft construction: The G 110 files</td>
<td>p0558 H82-30303</td>
</tr>
<tr>
<td>Improved penetrant process evaluation criteria</td>
<td>p0560 H82-30386</td>
</tr>
<tr>
<td>Aircraft Performance</td>
<td>p0661 A82-14390</td>
</tr>
<tr>
<td>Subject Index</td>
<td>A-61</td>
</tr>
<tr>
<td>Design of direct digital flight-mode control systems for high-performance aircraft</td>
<td>p0665 A82-14407</td>
</tr>
<tr>
<td>The X-14 - 24 years of V/STOL flight testing</td>
<td>p0749 A82-14829</td>
</tr>
<tr>
<td>Ball-Barlow Jotting flight tests</td>
<td>p0755 A82-14927</td>
</tr>
<tr>
<td>P/A-16A high angle of attack/spin testing</td>
<td>p0756 A82-14928</td>
</tr>
<tr>
<td>KC-10 flight test program</td>
<td>p0756 A82-14934</td>
</tr>
<tr>
<td>The all composite Lear Fan 2100</td>
<td>p0776 A82-14935</td>
</tr>
<tr>
<td>P/A-16 roll rate improvement program</td>
<td>p0777 A82-14936</td>
</tr>
<tr>
<td>AV-8B technical update - Leading edge root extension development</td>
<td>p0777 A82-14940</td>
</tr>
<tr>
<td>Operational evaluation of thunderstorm penetration tests during project Storm Hazards '80</td>
<td>p0787 A82-14958</td>
</tr>
<tr>
<td>Aircraft performance sensitivities to lateral and vertical profiles</td>
<td>p0801 A82-15846</td>
</tr>
<tr>
<td>The well tempered transport aircraft engine</td>
<td>p0808 A82-15846</td>
</tr>
<tr>
<td>Sir Henry Boyce Memorial Lecture/</td>
<td>p103 A82-16145</td>
</tr>
<tr>
<td>CRM: Toward - In a class of its own</td>
<td>p107 A82-16800</td>
</tr>
<tr>
<td>Experience with high performance V/STOL fighter projects at ABB</td>
<td>p107 A82-16801</td>
</tr>
<tr>
<td>Turboprop resurgence - The next step</td>
<td>p107 A82-17149</td>
</tr>
<tr>
<td>Energy savings with today's technology</td>
<td>p107 A82-17149</td>
</tr>
<tr>
<td>Aircraft fuel management through in-flight monitoring</td>
<td>p107 A82-17149</td>
</tr>
<tr>
<td>Flight crew management and cockpit performance systems</td>
<td>p111 A82-17282</td>
</tr>
<tr>
<td>Computer flight planning for fuel efficiency</td>
<td>p111 A82-17283</td>
</tr>
<tr>
<td>Liquid hydrogen - An outstanding alternate fuel</td>
<td>p111 A82-17284</td>
</tr>
<tr>
<td>Transport aircraft</td>
<td>p111 A82-17286</td>
</tr>
<tr>
<td>Take-off ground roll of propeller driven aircraft</td>
<td>p111 A82-17290</td>
</tr>
<tr>
<td>Determination of Learjet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data</td>
<td>p116 A82-17827</td>
</tr>
<tr>
<td>Simulation of phugoid excitation due to hazardous wind shear</td>
<td>p116 A82-17828</td>
</tr>
<tr>
<td>Aircraft fuel management through in-flight monitoring</td>
<td>p116 A82-17828</td>
</tr>
<tr>
<td>Digital test pilot concept</td>
<td>p117 A82-17843</td>
</tr>
<tr>
<td>Digital test pilot concept</td>
<td>p117 A82-18767</td>
</tr>
<tr>
<td>Kamysz county atmospheric cruise control -- Most efficient airspeed for a given wind component</td>
<td>p119 A82-17895</td>
</tr>
<tr>
<td>Optimum configuration for a 10 passenger business turbine jet airplane</td>
<td>p119 A82-18795</td>
</tr>
<tr>
<td>Mission performance of the Boeing 757</td>
<td>p126 A82-18322</td>
</tr>
<tr>
<td>Flight safety - In Tomcat - Preliminary test results</td>
<td>p126 A82-18346</td>
</tr>
<tr>
<td>Boeing 757 - Introducing the big-fan narrowbody</td>
<td>p126 A82-18349</td>
</tr>
<tr>
<td>Operational and performance aspects of fuel management in civil aircraft</td>
<td>p169 A82-20518</td>
</tr>
<tr>
<td>Studies of modern technology airships for maritime patrol applications</td>
<td>p173 A82-20554</td>
</tr>
<tr>
<td>The airship - Its application and promotional activity</td>
<td>p173 A82-20555</td>
</tr>
</tbody>
</table>
AIRCRAFT PILOTS

[NASA-TP-83272] p0301 882-20145
Meteorology impact on future aircraft design
p0310 882-21143

Combat Aircraft Maneuverability
(AGARD-CP-319) p036 882-22187
The military flying qualities specification: a help or a hindrance to good fighter design — flight control systems
p036 882-22190
Development of a tentative flying qualities criterion for aircraft with independent control of six degrees of freedom: Analysis and flight test
p036 882-22191
Experimental flight test programs for improving combat aircraft maneuverability by maneuver flaps and pylons split flaps
p036 882-22192
Multivariable closed loop control analyses and syntheses for complex flight systems
p036 882-22193
Aerodynamic tailoring for control and performance: Are requirements compatible?
p036 882-22200
Experience with high performance V/STOL fighter projects at NASA
p036 882-22190
A flight investigation of blade-section aerodynamics for a helicopter main rotor having BC-952 airfoil sections
p033 882-23192
NASA/HAA Advanced Rotocraft Technology and Tilt Rotor Workshop. Volume 7: Tilt Rotor Session
p036 882-22670
The effect of very heavy rain upon aircraft and its role in wind shear attributed accidents
p001 882-25179
Use of optimization to predict the effect of selected parameters on counter aircraft performance
p045 882-26279
Mission effectiveness of the AV-8B Harrier 2 could be improved if actions are taken now
p045 882-26284
Aerodynamic investigations to determine possible ice flight paths
p045 882-26284
Composite flight test data for Nomad R280 aircraft
p046 882-27235
Radiation/catalytic augmented combustion
p047 882-27289
Kevlar/PBO-15 reduced drag DC-9 reverser stagg fairing
p047 882-27434
Some design considerations for solar-powered aircraft
p057 882-31448
Aircraft BED in Europe - A perspective view
p047 882-32350

AIRCRAFT PILOTS

[NTC FIGHTER]

Relationships between naval aviation safety and pilot flight experience
p001 882-11031
P/AV-18 Hornet - One man operability
p008 882-13989
The integration of control and display concepts for improved situational awareness
p061 882-13972
Assessing pilot workload - Without disturbing pilot behavior
p069 882-14745
Piloted simulation of hover and transition of a vertical attitude takeoff and landing aircraft
p010 882-16910
Helicopters - Route operations
p015 882-19017
The simulator and the airline pilot
p017 882-20527
The system of "objective control"
[AD-A112376] p049 882-39245
Boeing's new 767 earns crew workload
p049 882-42348
The prevalence of visual deficiencies among 1979 general aviation accident aircraft
[AD-A106489] p017 882-16054
Update of the summary report of 1977-1979 task force on aircrew workload
[AD-A112547] p048 882-26258
A study of wind shear effects on aircraft operations and safety in Australia

AIRCRAFT PILOTS

[NTC AIRPLANE]

A CAD approach to cost estimating composite aircraft
p020 882-28245
Aircraft Production Costs

AIRCRAFT POLEM sources

AIRCRAFT ENGINEERS

AIRCRAFT PRODUCTION

Automated Paint and Process Line /APPL/ -- for aircraft production
[AILA 81-2166] p002 882-10120
Development of aircraft production engineering
discipline at IIT, Bombay
p001 882-11317
Aeronautics in China - An AIAA report -- Book
p004 882-13150
A system safety program for aircraft production and deployment
p080 882-14993
The technology of sheet-metal stamping: the production of aircraft /2nd revised and enlarged edition/ -- Russian book
p080 882-14999
Special problems associated with aircraft radomes
p106 882-16558
Noise control plan for a new airplane manufacturing facility
p119 882-17830
The future of integrated CAD/CAM systems - The Boeing perspective
p167 882-20276
The aircraft manufacturer's needs as a manufacturer user
p171 882-20530
The inter-relation between design, construction and maintenance
p229 882-24010
CAD/CAM in British Aerospace - Aircraft Group
p229 882-24373
Technology for quality and quantity in a new fighter [SAE PAPER 811100]
p233 882-24004
Sokoruy tail rotor - 1980: Advanced manufacturing and quality control techniques
p279 882-26390
Structural design and construction of the New Technology Wing
p283 882-26541
Tool use in cutting operations involving integral structural components in aircraft construction
p326 882-28073
A comparison of properties of single overlap tension joints prepared by ultrasonic welding and other means
[AILA 82-0661]
p335 882-30091
A giant step toward composite helicopters
p394 882-30294
British aerospace begins update effort
p378 882-30674
From the A 300 to the A 310
p382 882-33542
The DRAFO system - Materials means and logic functions
p387 882-37521
Adaptation of pulsation to the manufacture of helicopter components
p501 882-40537
Design and fabrication of a composite rear fuselage for the UP-60 /Black Hawk/
p502 882-40544
A one-shot autoclave manufacturing process for carbon epoxy components
p509 882-40935
Fatigue behavior of welded joints
p510 882-41115
Aircraft BED in Europe - A perspective view
p546 882-42544
Selected furnace based components for the aerospace industry
p585 882-46529
Systems study of transport aircraft incorporating advanced aluminum alloys
Rational production methods for the manufacture of helicopter rotor blades -- AO-105 helicopter
[AD-A106489] p316 882-21188
Learning and costs in airframe production, part 1
[AD-A112948] p079 882-28210
International aviation (selected articles)
[AD-A112622] p051 882-28245
Aircraft Production Costs

AIRCRAFT PRODUCTION COSTS

NT AIRPLANE PRODUCTION COSTS

A CAD approach to cost estimating composite aircraft
p020 882-28245

A-62
Aircraft safety contd

- A system safety program for aircraft production and deployment
  - Effect of fleet size on estimates of safety against airframe fatigue
  - Determination of the flammability characteristics of aerospace hydraulic fluids
  - Techniques for overhead-wire detection to prevent helicopter wirestikes
  - Why safety ---- fuel conservation through aircraft safety
  - Accident prevention - A regulatory view
  - The shape of the air traffic control system of the future - A U.S. perspective
  - Air traffic control problems and solutions
  - Productivity and safety --- reducing transport aircraft operating costs and increasing safety
  - Flight crew management and cockpit performance systems
  - A binary matrix technique for aircraft collision threat recognition and avoidance
  - Conductive prepregs for lightning strike protection on aircraft
  - Minimum cost performance monitoring of turboshaft engines
  - Airworthiness of airships
  - The case for helicopter hoisting
  - NSG-3 overview --- aircraft maintenance program development
  - Designing for continued airworthiness - General aviation
  - Scanning strategies for air traffic control radars
  - Standardization of helicopter fatigue methodology - A manufacturer's view
  - Flight test data acquisition and interpretation
  - The reliability and safety of small passenger aircraft
  - Design for the operating environment - Ring-finned tail rotor program
  - Automation of air-traffic control
  - No-Tail-Rotor helicopter
  - Sudden changes in wind velocity - Their effect on aircraft and means of reducing hazard. I
  - Secondary radar for airborne collision avoidance
  - Runway end intersection design
  - Instrumentation for testing aircraft antistatic protection
  - Aircraft fire safety research with antimisting foams - Status report
  - Will hydrogen-fueled aircraft be safe
  - Airborne warning systems for natural and aircraft-initiated lightning
  - Electromagnetic interaction of lightning with aircraft
  - Lightning simulation and testing
  - Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protcection design criteria
  - Complete flexibility and realism in radar simulation
  - The detection of low level wind shear. II
  - Wind shear - Its effect on an aircraft and ways to reduce the hazard. II
  - 'Listening' systems to increase aircraft structural safety and reduce costs
  - Touchdown technology --- large aircraft landing gear stress
  - An evaluation of helicopter autorotation assist concepts
  - The performance of warning systems in avoiding Controlled-Flight-Into-Terrain /CFIT/ accidents
  - An analysis of civil aviation propeller-to-person accidents: 1965-1979
  - Computer Air Carrier Symposium
  - Disengagement of safety harness buckles - C74
  - Active Beacon Collision Avoidance System (ACAS): logic performance during operational flight tests
  - Workshop on Mathematical Fire Modeling
  - Doppler radar-research and application to aviation flight safety, 1977 - 1979
  - Aircraft collision avoidance and air traffic safety
  - Variable response load limiting device for CT4 safety harness buckles
  - A system safety model for developmental aircraft programs
  - Safety (aviation material)
  - Aircraft collision avoidance and air traffic safety
  - Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation

Subject index
Assessment of lighting simulation test techniques, part 1  
(AD-A112626)  
p0977 AB2-27663

Flight attendant injuries: 1971-1976  
(AD-A149051)  
p0531 AB2-29274

Aircraft fire safety  
(ADABD-LS-123)  
p0532 AB2-29279

Aircraft fire mishap experience/crash fire scenario quantitation  
p0532 AB2-29280

Human response to fire  
p0532 AB2-29281

Aviation fuels - future outlook and impact on aircraft fire threat  
p0532 AB2-29282

Fireworthiness of transport aircraft interior  
p0533 AB2-29284

NASA aeronautics  
(NASA-EP-05)  
p0557 AB2-30203

Aerodynamic penalties of heavy rain on a landing aircraft  
(NASA-CHR-156885)  
p0556 AB2-30298

Data acquisition system for NASA LABC impact dynamics research facility  
p0561 AB2-30525

Summary of Federal Aviation Administration response to National Transportation Safety Board safety recommendations  
(AD-A154885)  
p0568 AB2-31313

Summary of Federal Aviation Administration response to National Transportation Safety Board safety recommendations  
(AD-A154886)  
p0568 AB2-31314

Analysis of active BCAS alert rates and protection based on actual aircraft tracks  
(AD-A16002)  
p0568 AB2-31319

Functional design to support CDFI/DABS flight experiments  
(NASA-CHR-165947)  
p0569 AB2-31326

Multilevel sensory analysis and problem-solving in the flight domain  
P0573 AB2-31967

Efficient transfer of weather information to the pilot in flight  
(NASA-CHR-165989)  
p0591 AB2-32363

A safety appraisal of the air traffic control system  
P0606 AB2-33266

FAT air traffic activity, FY 1981  
P0607 AB2-33371

AIRCRAFT SPECIFICATIONS  
From claws to jaws — Tiger into Tiger shark  
p0281 AB2-26538

The low temperature properties of aviation fuels  
[AIAA PAPER 82-02-48]  
p0422 AB2-35306

Perspectives of the flying qualities specification  
(AIAA PAPER 82-1539)  
p0488 AB2-39123

Flying qualities requirements for roll CAS systems  
(AIAA PAPER 82-1536)  
p0496 AB2-40287

Sport aircraft — Russian book  
p0498 AB2-40983

Point of view of a helicopter manufacturer on airworthiness regulations  
p0247 AB2-18137

Army Lynx: Product development switched to military combat development  
p0247 AB2-18143

A light helicopter for night firing  
p0248 AB2-18144

The military flying qualities specification, a help or a hindrance to good fighter design? — flight control systems  
p0346 AB2-22190

Development of a tentative flying qualities criterion for aircraft with independent control of six degrees of freedom: Analysis and flight test  
p0347 AB2-22191

Socata: TB 20 Tramais given German debut  
(NASA-WM-76700)  
p0352 AB2-22247

Helicopter Handling Qualities  
(NASA-CP-2219)  
p0364 AB2-23209

F TOE and VTOOL handling qualities specifications, an overview of the current status  
p0364 AB2-23209

AIRCRAFT SPEK  
Applications of parameter estimation in the study of spanning airplanes  
(AIAA PAPER 82-1309)  
p0487 AB2-39090

Current perspectives on emergency spin-recovery systems  
p0549 AB2-32624

Spin recovery training — licensing requirement  
(SPO-G-04-20)  
p0525 AB2-10022

Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft  
(NASA-TR-82-32326)  
p0527 AB2-18163

A criterion for the prediction of the recovery characteristics of spinning aircraft  
[RAE-TN-ADR-2251]  
p0267 AB2-19223

An experimental study of the effect of tail configuration on the spinning characteristics of general aviation aircraft — static wind tunnel force measurements  
(NASA-CHR-168578)  
p0267 AB2-19224

Analysis of rotary balance data for the F-15 airplane including the effect of conformal fuel tanks  
(NASA-CHR-0479)  
p0349 AB2-22213

AIRCRAFT STABILITY  
4. ROVERSING STABILITY  
On computing Floguet transition matrices of rotorcraft  
p0313 AB2-11225

A note on fatal aircraft accidents involving metal fatigue  
p0310 AB2-11400

Numerical treatment of helicopter rotor stability problems  
p0319 AB2-12005

Navigation for helicopters by multiple use of inertial sensors  
p0367 AB2-14713

The use of observers on relaxed static stability aircraft  
p0368 AB2-14740

F/A-18A high angle of attack/spin testing  
p0376 AB2-14934

Acceptance testing of the Calpan variable stability Learjet  
p0377 AB2-14937

AV-8B technical update — Leading edge root extension development  
p0377 AB2-14940

Direct free-flight analysis of aircraft dynamics at high angles of attack  
p0381 AB2-15596

Development and validation of the V/STOL aerodynamics and stability and control manual  
p0107 AB2-16903

Thrust reversing effects on twin-engine aircraft having nonaxisymmetric nozzles  
p0108 AB2-16911

Bifurcation analysis of nonlinear stability of aircraft at high angles of attack  
(AIAA PAPER 82-0244)  
p0117 AB2-17062

Control law development for a close-coupled canard, relaxed static stability fighter  
(AIAA PAPER 82-0180)  
p0125 AB2-17984

Aircraft parameter identification in the presence of atmospheric turbulence  
p0218 AB2-23227

Advancing blade flight data gathered  
p0297 AB2-26312

Analysis of a multihinged empennage with allowance for shear strain  
p0333 AB2-25934

Application of optimal control techniques to aircraft flutter suppression and load alleviation  
(AIAA 82-0720)  
p0340 AB2-30173

Identification of the form of motion of an aircraft  
p0373 AB2-31824

A unified and generalized definition of static longitudinal stability in aircraft  
p0377 AB2-32135

Calculation of the lift distribution and aerodynamic derivatives of quasi-steady elastic aircraft  
p0390 AB2-34639

Thrust reverser induced flow interference on tactical aircraft stability and control  
(AIAA PAPER 82-1133)  
p0438 AB2-37693

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation  
(ABS-PREPRINT 01-12)  
p0402 AB2-37785

Considerations of open-loop, closed-loop, and adaptive multicyclic control systems  

AIRCRAFT STRUCTURES

[APS PEPB 81-11] p0442 A82-37786
Simulator investigations of various side-stick controller/stability and control augmentation systems for helicopter terrain flight
[AIAA 82-1522] p0464 A82-38942
Modal control of relaxed static stability aircraft
[AIAA 82-1524] p0464 A82-38944
An X-19a aircraft control system concept
[AIAA 82-1540] p0485 A82-38954
An alternate method of specifying bandwidth for flying qualities
[AIAA 82-1609] p0485 A82-38980
X-29A flight control system design experiences
[AIAA 82-1538] p0486 A82-39003
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack
[AIAA PAPER 82-1295] p0486 A82-39002
Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011
[AIAA PAPER 82-1297] p0487 A82-39004
Dynamic stability of flexible forward swept wing aircraft
[AIAA PAPER 82-1325] p0488 A82-39102
A ground-simulation investigation of helicopter decelerating instrument approaches
[AIAA PAPER 82-1346] p0488 A82-39110
Maneuver stability of a vehicle with a lowered body
[AIAA PAPER 82-1347] p0488 A82-39119
Sensor stabilization requirements on F-15s - A simulation study
[AIAA PAPER 82-1363] p0489 A82-39741
Aerodynamic aspects of aircraft dynamics at high angles of attack
[AGARD Lecture/ ] p0495 A82-39836
Current perspectives on emergency spin-recovery systems
[p0549 A82-41264
Implicit model-following technique - application to the design of longitudinal stability augmentation systems
[p0551 A82-43571
Electronic aircraft stabilization
[SEE PAPER 811763] p0555 A82-44234
XY-15 program update
[p0556 A82-44468
Estimation of airplane stability and control derivatives from large amplitude longitudinal maneuvers
[NASA-TE-23165] p0028 A82-10042
The stability of portable bridges carried on trucks beneath helicopters
[ARL/AERO-EEP-154] p0319 A82-21213
Stability and control of the Gossamer human-powered aircraft by analysis and flight test
[NASA-CE-163119] p0557 A82-30289
Description of a simple model to determine landing gear forces during the takeoff of an aerodynamically unstable aircraft
[ER-228] p0570 A82-31333
Towards a better understanding of helicopter stability derivatives
[NASA-TE-43277] p0592 A82-32376
Curved flow wind tunnel test of F-18 aircraft
[NASA-CE-163905] p0604 A82-33339

AIRCRAFT STRUCTURES

NT AFFIX CONTRIBUTORS
NT AIRBONES
NT POREBONES
NT CFSLAEGES
NT ROSES (FOREPORES)
NT PLASTIC AIRCRAFT STRUCTURES

The application of improved aluminum alloys and steels in aircraft structures
Some possibilities for composite light aircraft construction
Sophisticated aircraft structure developments - Combat aeroplanes
Analytical determination of undercarriage retraction kinematics
The balloon and the airship technological heritage
Design analysis of high temperature transparent windshields for high performance aircraft

Acoustic emission - An emerging technology for assessing fatigue damage in aircraft structure
Fatigue substantiation of non-linear structures
Dynamic response of aircraft structure to gun shot loads
Emerging technologies in aerospace structures, design, structural dynamics and aerothermodynamics
Impact-initiated damage thresholds in composites
Response of nonlinear aircraft structural panels to high intensity noise
Quantification of the thermal environment for externally carried aircraft stores and ordnance
Pragmatic determination of fatigue crack growth rates in aircraft components
Fatigue methodology - A technical management system for helicopter safety and durability
Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[SEE PAPER 81-2405] p0602 A82-13975
Flight vibration optimization via conformal mapping
Techniques for modifying airfoils and fairings on aircraft using foam and fiberglass
The load-carrying behavior of a trapezoidal aluminim-alloy supporting element, subjected to a compressive stress, in the postbuckling region
Aircraft composite materials and structures
Crack edge instability - A criterion for safe crack propagation limit in this sheet
Subsonic flow over airborne optical turrets
Icing analysis of an unprotected aircraft radome
Application of the finite element method to the calculation of the modes and frequencies of natural vibrations of aircraft structures
Calculation of the stability of crosswise-reinforced cylindrical shells
Development of a transmission loss test facility for light aircraft structures
A crack-closure model for predicting fatigue crack growth under aircraft spectrum loading
Performance flight test evaluation of the Bell-Argosy J-1 Jetwing STOL research aircraft
AV-8B Harrier II
Calculation of sensitivity derivatives in thermal problems by finite differences
Low-frequency eddy current inspection of aircraft structure
On the sonic fatigue life estimation of skin structures at room and elevated temperatures
Novel approaches to electron beam welding machine utilization
Diffusion bonding in superplastic forming/diffusion bonding
Aluminum and its alloys - Weldability
Material/structure degradation due to fretting and fretting-initiated fatigue
A new approach to the problem of stress corrosion cracking in 7075-T6 aluminum
AIBCHAFT SIEOCTOBBS COIID

- experience with aerospace structures
- Corrosion prevention methods developed from direct calculation of wing-body-nacelle interference in flight trail of the Aircraft Fatigue Data Analysis
- Design and maintenance against corrosion of aerospace structures
- Corrosion Fatigue conferences
- Superplastic aluminum evaluation
- Stiffness degradation of impact damaged structure
- Damage from High explosive (HE) projectiles
- Prediction of fatigue crack propagation in plane specimens and thin-walled structural elements of aircraft wing skin under programmed loading
- Aircraft exoskeleton
- A method for determination of the aeroelastic behavior of aircraft with active control systems
- Finite difference computation of the steady transonic potential flow around airplanes
- Flight data analysis of the aircraft Fatigue Study System (AFDDS) Mk 2 prototype
- Calculation of wing-body-nacelle interference in subsonic and transonic potential flow
- Estimation methods for the determination of dynamic responses of elastic aircraft --- to random loads
- Environmental exposure effects on composite materials for commercial aircraft
- Design Manual for impact damage tolerant aircraft structure
- Description of projectile threats
- Analysis methods for predicting structural response to projectile impact
- Analysis methods for ballistic damage size and type
- Damage from High explosive (HE) projectiles
- Hydrodynamic ram damage
- Effects of cyclic loading on projectile impact damage
- Stiffness degradation of impact damaged structure
- Analysis of multiple load path panels containing impact damage
- Superplastic aluminum evaluation
- Corrosion Fatigue --- conferences
- Mechanisms of corrosion fatigue --- of high strength aluminum alloys
- Flight-by-flight corrosion fatigue tests
- Design and maintenance against corrosion of aerospace structures
- Corrosion prevention methods developed from direct experience with aerospace structures
- Corrosion prevention measures used in the construction of an aircraft airframe: The case of 2014 and 2124 alloys

Recent developments in materials and processes for aircraft corrosion control
- New concepts in multifunctional corrosion for aircraft and other systems
- Corrosion protection schemes for aircraft structures: Some examples for the corrosion behavior of Al alloys
- The ultrasonic inspection of C.P.C. --- carbon fiber wing spar
- The effects of slight non-linearities on modal testing of helicopter-like structures
- Theoretical investigations on the influence of different stroke, tail unit, and conventional HLV arrangement as well as of CTV on the aerodynamic characteristics of lighter aircraft configurations
- Electroforming of space and aircraft structures
- Aeronautical Research Laboratories Structures Division
- Literature on the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials
- Electroforming of space and aircraft structures
- Aeronautical Research Laboratories Structures Division
- Are requirements compatible?
- Qualification program in aerospace structures
- Practical applications of fracture mechanics
- Structural system identification technology verification
- Fatigue analysis of composite materials using the fail-safe concept
- Acoustic noise test as part of the dynamic qualification program in aerospace structures
- Aeroelastic tailoring for control and performance: Are requirements compatible?
- Revolution in airplane construction? Grob G110: The first modern fiber glass concept airplane shortly before its maiden flight
- Historical perspectives on thermostructural research at the NASA Langley Research Laboratory from 1948 to 1958
- A method for determining the aeroelastic behavior of aircraft with active control systems
- Standard tests for toughened resin composites --- for aircraft structures
- Aerodynamics/Aces: Aircraft energy efficiency
- Mechanical properties of hot isostatic pressed P/M-titanium for helicopter components
- Panel Optimization with Integrated Software (POIS), Volume I: PFEA: Interactive program for preliminary minimum weight design
- Advanced casting: Today and tomorrow --- aerospace industry components casting
- Reentry aerodynamics and optical propagation characteristics of a large-scale target model
- Grob aircraft construction: The G 110 flies
- Flow control for a high energy laser target using trapped vortices
- Noise transmission loss of aircraft panels using acoustic intensity methods

A-68
## SUBJECT INDEX

A-69

<table>
<thead>
<tr>
<th>AIRCRAFT WINGSPAN</th>
<th>AIRFOIL PROFILES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of the Weber method for supercritical-angled numerical analysis of airfoils</td>
<td>A theoretical study of the impact of aircraft wake vortexes on roofs in the final approach area of Frankfurt airport</td>
</tr>
<tr>
<td>[AIAA PAPER 84-0362]</td>
<td>[DFVLR-MIT-82-01]</td>
</tr>
<tr>
<td>[AIAA PAPER 82-10362]</td>
<td>[NASA-TN-84804]</td>
</tr>
<tr>
<td>Strong matching method for computing transonic viscous flows including wakes and separations - Lifting airfoils</td>
<td>Wind tunnel measurements of three-dimensional wakes of buildings - for aircraft safety applications</td>
</tr>
<tr>
<td>[AIAA PAPER 82-10362]</td>
<td>[NASA-CR-3565]</td>
</tr>
<tr>
<td>Touchdown technology - large aircraft landing</td>
<td>B-747 vortex alleviation flight tests: Ground-based sensor measurements</td>
</tr>
<tr>
<td>[AIAA PAPER 82-11261]</td>
<td>[NASA-M2-2921]</td>
</tr>
<tr>
<td>Experimental stress analysis of a thin-walled commercial jet transport crashworthiness</td>
<td>Reduction in parachute drag due to forebody wake effects</td>
</tr>
<tr>
<td>[AIAA PAPER 82-2022]</td>
<td>[SR81-030124]</td>
</tr>
<tr>
<td>Airfoil characteristics of the external DSB</td>
<td>Transonic applications of the Wake Imaging System</td>
</tr>
<tr>
<td>[AIAA PAPER 82-169041]</td>
<td>[NASA PAPBB 82-31309]</td>
</tr>
<tr>
<td>Aerodynamic characteristics of the external USB powered lift system using side fences for enhancement of Canada's flight operations</td>
<td>Airfoil profiles</td>
</tr>
<tr>
<td>Lifting airfoils</td>
<td>Transonic applications of the Wake Imaging System</td>
</tr>
<tr>
<td>[NASA-CR-165849]</td>
<td>[NASA PAPBB 82-31309]</td>
</tr>
<tr>
<td>Aircraft tires</td>
<td>A method to determine runway capacity</td>
</tr>
<tr>
<td>[NASA-CR-165849]</td>
<td>[NASA-M2-2921]</td>
</tr>
<tr>
<td>Aircraft survivability</td>
<td>Measured increases in airfield capacity by changing runway end intersection design</td>
</tr>
<tr>
<td>[AIAA PAPER 82-10362]</td>
<td>[NASA-M2-2921]</td>
</tr>
<tr>
<td>Aircraft red.</td>
<td>The requirements for reduced IFB separations on heavy high-lift aircrafts</td>
</tr>
<tr>
<td>[NASA-CR-165849]</td>
<td>[NASA-M2-2921]</td>
</tr>
<tr>
<td>Aircraft Red.</td>
<td>Approximate boundary condition procedure for the two-dimensional numerical solution of vortex wakes</td>
</tr>
<tr>
<td>[NASA-TH-84804]</td>
<td>[AIAA PAPER 82-0951]</td>
</tr>
<tr>
<td>Measured pavement response to transient aircraft tire loads on aircraft tire models for aircraft simulation</td>
<td>Turbulent wake development behind streamlined bodies</td>
</tr>
<tr>
<td>[NASA-PAPBB 82-44244]</td>
<td>[NASA PAPBB 82-1304]</td>
</tr>
<tr>
<td>Airfoil profiles</td>
<td>Simulator study of vortex encounters by a twin-engine, commercial, jet transport airplane</td>
</tr>
<tr>
<td>[NASA-CR-165849]</td>
<td>[AIAA PAPER 82-10362]</td>
</tr>
<tr>
<td>Aircraft Red.</td>
<td>A-69</td>
</tr>
</tbody>
</table>
Experimental studies of the Eppler 61 airfoil at low Reynolds numbers
\[\text{[AIAA PAPER 82-0345]}\]
Flow field around an oscillating airfoil
\[\text{[AIAA PAPER 82-0345]}\]
A new facility and technique for two-dimensional aerodynamic testing
\[\text{[AIAA 82-0600]}\]
Supercritical flow past symmetrical airfoils
\[\text{p0238 AIBFOILS}\]
An experimental study of steady and quasi-steady jet flaps
\[\text{p0275 AIBFOILS}\]
Experimental study of the flowfield of an airfoil with deflected spoiler
\[\text{[AIAA PAPER 82-0126]}\]
A computer-controlled oscillation mechanism for steady aerodynamics experiments
\[\text{p0328 AIBFOILS}\]
Transonic time-response analysis of three D.O.F. conventional and supercritical airfoils
\[\text{[AIAA 82-0088]}\]
Material flow and defect formation as forcing an airfoil shape from metal-matrix composites
\[\text{p035 AIBFOILS}\]
Structural optimization of a swept wing on the basis of the aileron efficiency condition
\[\text{p038 AIBFOILS}\]
The initial lift and drag of an impulsively started airfoil of finite thickness
\[\text{p039 AIBFOILS}\]
Optimization of propeller blade shape by an analytical method
\[\text{[AIAA PAPER 82-1125]}\]
A two-dimensional boundary-layer program for transonic airfoil heat transfer calculations
\[\text{[ASBE PAPER 82-02-97]}\]
The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine
\[\text{[ASBE PAPER 82-02-222]}\]
Heat transfer optimised turbine rotor blades - An experimental study using transient techniques
\[\text{[ASBE PAPER 82-02-304]}\]
A series of airfoils designed by transonic drag minimization for Gates Learjet aircraft
\[\text{[ASBE PAPER 82-35565]}\]
A new transonic Airfoil Design Method and its application to helicopter rotor airfoil design
\[\text{p0436 AIBFOILS}\]
Viscous transonic airfoil flow simulations
\[\text{[ASBE PAPER 82-02-35565]}\]
Investigation of the unsteady loads on a transport aircraft type airfoil with two saturating oscillating trailing edge flaps, at transonic speed and high Reynolds numbers
\[\text{p0507 AIBFOILS}\]
Design and texts of airfoils for sailplanes with an application to the ASW-198
\[\text{p0512 AIBFOILS}\]
Variable geometry airfoils as applied to the Denny B-5 and B-6 sailplanes
\[\text{p0512 AIBFOILS}\]
Advanced aerodynamic wing design for commercial transports - Review of a technology program in the Netherlands
\[\text{p0514 AIBFOILS}\]
Recent airfoil developments at DVLB
\[\text{p0518 AIBFOILS}\]
An examination of helicopter blade profiles and tips
\[\text{[ONERA, TP NO. 1982-35]}\]
The design of airfoil profiles with trailing edge loading
\[\text{[ASBE PAPER 82-42811]}\]
Transonic flutter and response analyses of two 3-degree-of-freedom airfoils
\[\text{p055 AIBFOILS}\]
Wind-tunnel results for a modified 17-percent-thick low-speed airfoil section
\[\text{[NASA TP-1919]}\]
Aerocoustic theory for noncompact wing-root interaction
\[\text{[FDAL-81-7]}\]
Subcritical and supercritical airfoils for given pressure distribution
\[\text{p0085 AIBFOILS}\]
Subject Index

Airline maintenance strategy p0294 A82-27883
The modular ATE --- for cost effective maintenance of new generation avionics p0294 A82-27886
Aircraft evaluation in air network planning p0380 A82-33125
Principles of efficient energy use at Interflag p0380 A82-33250
Simulation reaches reality p0382 A82-33547
Essentials of aviation management /2nd edition/ p0383 A82-33646
--- Book
The U.S. airline industry - En route to deregulation p0385 A82-33920
The recognition of air worthiness of aircraft - Consents to a remarkable judicial decision p0402 A82-38461
Complete flexibility and realism in radar simulation p0402 A82-38205
Fuel conservation: The airline - IFC p0403 A82-38444
Elimination of the total costs incurred in the employment of passenger jet aircraft p0410 A82-39247
The fourth dimension --- flight management system for airline operations p0492 A82-39540
Requirements and possible design choices for improving the operation of aircraft in the terminal control area p0544 A82-41801
The sporty game --- on wide body commercial airliner business history p0547 A82-42572
Helicopter commuters - An optimistic outlook p0556 A82-49470
Optima cimb and descent trajectories for airline missions p0599 A82-11082
Analysis of integrated fuel-efficient, low-noise procedures in terminal-area operations [DB81-028933] p0609 A82-13014
Air service, airport access and future technology [PB82-105956] p0612 A82-16100
Aircraft Corrosion [AGARD-CP-315] p0614 A82-17348
An airline view of the corrosion problem p0614 A82-17352
Design and maintenance against corrosion of aircraft structures p0614 A82-17356
The benefits of data exchange --- between airline and engine manufacturer [FHE-90048] p0623 A82-22095
FAA aviation forecasts-fiscal years 1982-1993 [AD-A44696] p0631 A82-29261
Aircraft energy consumption during airport ground operations [AD-A146138] p0659 A82-23352
FAA air traffic activity, FY 1981 [PB82-202361] p0667 A82-33371

Airplane Production Costs
A low cost maritime control aircraft-ship-weapon system --- antiship missile defense [AIAA PAPER 81-7660] p1009 A82-16916
Aircraft operability --- IFP engineering experience and requirements. I] p1014 A82-20562
Very large aircraft - A common response to a rapidly changing global environment [AIAA PAPER 82-0759] p1075 A82-31979

Airplane Weights
MT DISCONTINUE DESIGN WISCONSIS SYSTEM

Airport Lights
MT RUNWAY LIGHTS

Airport Planning
Noise control measures in the new Singapore International Airport p1017 A82-16746
Energy conservation through airport design and management p1012 A82-17287
A new end-fire ILS glide slope p1012 A82-18143
The city and aviation --- Russian book p1019 A82-18690
New life for an 'old' body - Vienna's master plan for revitalization p1016 A82-20172
Methodology for multiaircraft minimum noise impact landing trajectories p1021 A82-23037
Aircraft/airport compatibility - A constant challenge for aircraft designers p1024 A82-25119
IATA's Unit Terminal Concept p1026 A82-27049
The status of airport noise prediction, with special reference to the United Kingdom and Europe p1029 A82-28149
Privacy sewage treatment plant as a source of bird hazards at airport p1032 A82-33523
Runway and intersection design p1038 A82-33904
Traffic flow control in the Frankfurt/main airport area p1047 A82-37526
Noise pollution and airport regulation p1046 A82-40051
O'Hare International Airport - Impervious to proposed state efforts to limit airport noise p1046 A82-40052
Survey and design of airfields --- Russian book p1052 A82-43603
A method to determine runway capacity p1053 A82-44100
Phoenix airport solar photovoltaic concentrator project p1057 A82-44940
Planning for noise impact around airports p1058 A82-45847
Airfield construction - A reference book --- in Russian p1058 A82-48264
Analysis of integrated fuel-efficient, low-noise procedures in terminal-area operations [DB81-029833] p1069 A82-13014
Traffic intrastructure: Can planning still be carried through p1070 A82-22232
Characterization of future aircraft impacting aircraft and airport compatibility [NASA-TM-84476] p1046 A82-27233
Community noise p1056 A82-31072

Airport Towers
FAA names opportunities to discontinue or reduce operating hours of some airport control towers [PB81-222414] p1005 A82-11049

Airports
MT AIRPORTS
An airport wind shear detection and warning system using Doppler radar p0003 A82-10220
Costs of noise nuisance from aircraft p0006 A82-13314
A criterion for determining the causes of wind shear at Puntainiai Airport, on the basis of statistical data from barograph records p1000 A82-15468
Air traffic management for fuel economy p1010 A82-17279
The shape of the air traffic control system of the future - A U.S. perspective p1011 A82-17280
Air traffic control problems and solutions p1011 A82-17283
The Joint Airport Weather Study project --- investigation of convective microburst [AIAA PAPER 82-0017] p1011 A82-17274
Noise monitoring in airport communities p1012 A82-18731
Quantification of airport community noise impact in terms of noise levels, population density, and human subjective response

Airport radar systems — Russian book

Comparison of aircraft and ground vehicle noise levels in front and backyards of residences

Gateway diversity and competition in international air transportation

Utilization of radio equipment at airports and on airways — Russian book

Instruments and installations for meteorological measurements at airports — Russian book

A documented example of strong wind-shear

A modular automated approach to airfield weather systems

Low level wind shear detection system for airport landing approach areas using the Bertin Doppler acoustic sounder /Sodar/

A tower approach to plan visual range observation and prediction

Development and test of a tactical visibility sensor

Design of airport pavements for expansive soils

Analysis of two air traffic samples in the terminal area of Frankfurt/Hain, August 4th 1978

Effects of aircraft noise on the equilibrium of airport residents: Testing and utilization of a new methodology

Analysis of two air traffic samples in the terminal area of Frankfurt/Hain, August 4th 1978

Effects of aircraft noise on the equilibrium of airport residents: Supplementary analyses to the study carried out around only

Taking into account nighttime annoyance in the calculation of the psychoacoustic

The Modular Automated Weather System (MAWS) concept — airfield weather support

Automated Pilot Advisory System

Analysis of two air traffic samples in the terminal area of Frankfurt/Hain, August 4th 1978

Air service, airport access and future technology

Community sensitivity to changes in aircraft noise exposure

Requirements for instrument approaches to converging runways

Survey of 101 US airports for new multiple instrument approach concepts — runways

Noise impact on communities from aircraft

Development of a clear air radar to detect meteorological hazards at airports

FAA Statistical handbook of aviation

Weather deterioration models applied to alternate airport criteria

The Joint Airport Weather Studies Project

Traffic infrastructure: Can planning still be carried through

Measures to increase airfield capacity by changing aircraft runway occupancy characteristics

Summary of airport technology needs

Summary of community technology needs

Operational and functional requirements for the navigation system in terminal areas

Study of the de-icing properties of the ASOE-3 rotodome

The noise impact of proposed runway alternatives at Craig Airport

Analysis of two air traffic samples in the Frankfurt/Main airport terminal area, August 4, 1978

Analysis of two air traffic samples in the Frankfurt/Main airport terminal area, August 3, 1979

Aircraft energy conservation during airport ground operations

Preliminary analysis of the benefits and costs to implement the National Airspace System Plan

AIRSHIPS

MT HEAVY LIFT AIRSHIPS

Design aspects of non rigid airship envelopes

The balloon and the airship technological heritage

AIAA PAPER 81-1512


An introduction to the airship

Offshore uses of the airship

Studies of modern technology airships for maritime patrol applications

The airship - Its application and promotional activity

The uses of airships in the Royal Navy

Airworthiness of airships

A surveillance airship for the New Zealand environment

FAA aviation forecasts-fiscal years 1982-1993

Summary of community technology needs

Summary of airport technology needs

FAA aviation forecasts-fiscal years 1982-1993

A study of general aviation community noise impact and annoyance

Airport/Community Bojse

Airport noise

Summary of airport technology needs

Summary of community technology needs

The noise impact of proposed runway alternatives at Craig Airport

AIRSHIPS

MT HEAVY LIFT AIRSHIPS

Design aspects of non rigid airship envelopes

The balloon and the airship technological heritage

AIAA PAPER 81-1512


An introduction to the airship

Offshore uses of the airship

Studies of modern technology airships for maritime patrol applications

The airship - Its application and promotional activity

The uses of airships in the Royal Navy

Airworthiness of airships

A surveillance airship for the New Zealand environment
**SUBJECT INDEX**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skyship 500 - The development of a modern production airship</td>
<td>p0173 A82-20558</td>
</tr>
<tr>
<td>A history of airship and aviation in Russia - In the period up to 1914</td>
<td>p0174 A82-20559</td>
</tr>
<tr>
<td>A study of ground handling characteristics of a maritime patrol airship</td>
<td>p0081 A82-15625</td>
</tr>
<tr>
<td>Preliminary design study of a hybrid airship for flight research</td>
<td>p0220 A82-23317</td>
</tr>
<tr>
<td>The feasibility of a high-altitude aircraft platform with consideration of technological and societal constraints</td>
<td>p0535 A82-29313</td>
</tr>
<tr>
<td>The lateral response of an airship to turbulence</td>
<td>p0559 A82-30312</td>
</tr>
</tbody>
</table>

**AIRSPACE**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large terminal ramp access areas: Operational problems - Possible development of solutions</td>
<td>p0081 A82-15625</td>
</tr>
<tr>
<td>International plans for civil and military co-ordination</td>
<td>p0220 A82-23317</td>
</tr>
<tr>
<td>Modernizing air traffic control in France</td>
<td>p0285 A82-27046</td>
</tr>
<tr>
<td>The national airspace system plan</td>
<td>p0535 A82-29313</td>
</tr>
<tr>
<td>Extracts from Problems of Air Law, a collection of works of the section of air law of the Aviakhon Society of the USSR and Aviakhon RPS</td>
<td>p0081 A82-15625</td>
</tr>
<tr>
<td>Northeast corridor helicopter area navigation accuracy evaluation</td>
<td>p0605 A82-33369</td>
</tr>
<tr>
<td>Preliminary analysis of the benefits and costs to implement the National Airspace System Plan</td>
<td>p0605 A82-33369</td>
</tr>
<tr>
<td>Examination of the Federal Aviation Administration's plan for the national airspace system</td>
<td>p0611 A82-33403</td>
</tr>
</tbody>
</table>

**AIRSHIP**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of simulation and experimental data for a gliding parachute in dynamic flight</td>
<td>p0086 A82-10409</td>
</tr>
<tr>
<td>Procedures and analysis techniques for determining static air mass control speeds</td>
<td>p0086 A82-10409</td>
</tr>
<tr>
<td>The application of programmable pocket calculators for computations during survey flights</td>
<td>p0086 A82-10409</td>
</tr>
<tr>
<td>APRTK standard airspeed calibration procedures</td>
<td>p0088 A82-12074</td>
</tr>
<tr>
<td>A true air speed sensor for manned or unmanned aircraft</td>
<td>p0133 A82-14086</td>
</tr>
<tr>
<td>Use of optimization to predict the effect of selected parameters on comotor aircraft performance</td>
<td>p0201 A82-17151</td>
</tr>
<tr>
<td>Evaluation of the helicopter low airspeed system</td>
<td>p0201 A82-17151</td>
</tr>
<tr>
<td>Noise measurements on the helicopter BK 117</td>
<td>p0251 A82-18172</td>
</tr>
<tr>
<td>Noise probe position error corrections for Sea King MK 50 flight tests</td>
<td>p0392 A82-24620</td>
</tr>
<tr>
<td>Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft</td>
<td>p0392 A82-24620</td>
</tr>
<tr>
<td>The stability of portable bridges carried on slings beneath helicopters</td>
<td>p0469 A82-27282</td>
</tr>
</tbody>
</table>

**ALARM SYSTEMS**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Coast Pilot 9. Pacific and Arctic Coasts Alaska: Cape Spencer to Beaufort Sea</td>
<td>p0062 A82-13993</td>
</tr>
<tr>
<td>An algorithm, invariant relative to the initial data, for implementing the polynomial contouring method -- for computer aided design and manufacturing</td>
<td>p0582 A82-46628</td>
</tr>
</tbody>
</table>

**ALGEBRA**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>

**ALGORITHMS**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithms</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>

**ALONCE**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALONCE</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>

**ALPHABET**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alphabets</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>

**ALOS**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALOS</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>

**ALSO**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Also</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>

**ALTOCR**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altoctr</td>
<td>p0582 A82-33119</td>
</tr>
</tbody>
</table>
Considerations for optimum siting of HEXBAO to allow for the nail boundary layer in a stage of movement in Category III conditions all helicopter decelerated steep approach and landing controls and displays for all-weather operation of fire extinguishant materials.

Flame propagation of methyl alcohol in test geometries with and without a spray of a fire extinguishant material.

Transparent polyolefin film armor for improved protection of military aircraft against ballistics.

Enhanced and algorithms for waveform processing system design methodology.

Elastic-plastic finite-element analyses of his materials by better and cheaper.

Commentary on facilities used in the development of a program for the design of a new generation of attack aircraft.

Emission and analysis of mode c altitude data collected at high altitudes over the continental United States based on the program Alpha Jet.

Fire extinguishant materials and automated flight data processing.

Fire-extinguishing systems and automated flight data processing.

Fire extinguishant materials and automated flight data processing.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.

Helmet-mounted displays for all-weather operation.
Current pressure measuring system in the transonic wind tunnel (AD-A106275) Heads up display (NASA-CASE-LR-12630-1) Calculation of wing-body-nacelle interference in subsonic and transonic potential flow (AIAA PAPER 81-2841)

ANALYSIS (MATHEMATICS)

- Approximation
- Calculations of variations
- Computational fluid dynamics
- Conformal mapping
- Continuity (Mathematics)
- Differential equations
- Elliptic differential equations
- Error analysis
- Exterior values
- Failure of an equation
- Finite difference theory
- Finite element method
- Fourier series
- Fourier transformation
- Gaussian equation
- Harmonic analysis
- Integral equations
- Interpolation
- Iteration
- Kernel functions
- Least squares method
- Linear equations
- Matrix function
- Minimax and integration
- Monte Carlo method
- Numerical analysis
- Numerical integration
- Parse approximation
- Partial differential equations
- Quadratic equations
- Radiative transfer
- Real variables
- Relaxation methods (Mathematics)
- BURG-STRUT Method
- SCHWARZ-CHRISTOFFEL transformation
- Singularitiy (Mathematics)
- TOUZEL-LIGHTWIRE theory
- Tangents
- Taylor series
- Vector analysis
- Vorticity
- Lighting functions

ANALYSIS OF VARIANCE

A descriptive study of the application of analysis of variance and regression techniques in an error analysis program for test data obtained in a 16 foot transonic tunnel (AIAA PAPER 82-1339)

Analytic geometry

- Tangents
- Twosies

Analyzers

- Signal analyzers
- Analyses

Analysis

- AN/ESA (ANALYSIS)
- Anemometers
- Bot-Fill Aneemeters
- Laser anemometers

Anemometry

- U-velocity measurement

Angle of attack

- Nonlinear prediction of subsonic aerodynamic loads on wings and bodies at high angles of attack
- A large-scale investigation of engine influence on inert performance at angle-of-attack

A-78
A calculation method for slender wing-body configurations in supersonic flow at high angles of attack --- nonlinear force and pitching moment characteristics
[NASA-TP-1952] p0097 NASA-13106
Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory
[NDP-FE-122/5/PUB/7] p0252 NASA-18189
Theoretical and experimental investigations of wind tunnel interference due to angle of attack
[NDP-FE-124/5/PUB/34] p0320 NASA-21226
State of the art and recent perspectives on the study of the loss of control and spin
[AD-A111797] p0047 NASA-22197
A tactical display aid for primary flight training
[NASA-CA-16642] p0251 NASA-22230
Time-marching transonic flutter solutions including angle-of-attack effects
[NASA-TP-83297] p0363 NASA-23196
A two-degree-of-freedom flutter mount system with low damping for testing rigid wings at different angles of attack
[NASA-TP-83302] p0371 NASA-23549
Experimental and analytical results of tangential blowing applied to a subsonic V/STOL inlet
[NASA-TP-82847] p0393 NASA-24165
F-15 rotor balance data for an angle-of-attack range of 8 deg to 90 deg
[NASA-CA-3478] p0393 NASA-24168
Rotary balance data for an F-15 model with conformal fuel tanks for an angle-of-attack range of 8 deg to 90 deg
[NASA-CA-3516] p0393 NASA-24169
Tunnel-to-tunnel correlation
[AD-A110099] p0040 NASA-25200
Water tunnel flow visualization and wind tunnel data analysis of the F/A-18 --- leading edge extension vortex effects
[NASA-CH-15859] p0040 NASA-25215
Air data measurement using distributed processing and fiber optics data transmission
[AD-A110333] p0046 NASA-26214
Effects of wing-leading-edge modifications on a full-scale, low-wing general aviation airplane: Wind-tunnel investigation of high-angle-of-attack aerodynamic characteristics --- conducted in Langley 30'- by 60'-foot tunnel
Rough analysis of installation effects on turboprop noise
[NASA-TP-82926] p0574 NASA-32082
Measured and calculated effects of angle of attack on the transonic flutter of a supercritical wing
[NASA-TP-83276] p0613 NASA-33736
ANGULAR (MERIDIAN)
AT ANGLE OF ATTACK
AT ELEVATION ANGLE
AT SWEEPBACK
Turbulent boundary layer on a porous surface with injection at various angles to the wall
[AD-A111682] p0092 NASA-39482
Velocity and flow angle measurements in the Langley 0.3-meter transonic cryogenic tunnel using a laser transit anemometer
Some HTP laser velocimeter installation and operation considerations
ANGULAR ACCELERATION
The ideal controlled element for real airplanes is not E/A
[AD-A11606] p0085 NASA-38986
ANGULAR KINEMATICS
ANGULAR VELOCITY
P/T/4-18 roll rate improvement program
[AD-A11608] p0677 NASA-14939
3 DOF gyro analysis from measured and derived rates --- hydropneumatic simulation test
[AD-A11609] p0116 NASA-17831

ANIMALS
MT BIRDS
MT PIGEONS
ANISOTROPIC MEDIA
Component coupling with time-invariant mass matrix for nonrotating and nonrotating systems
[AD-A102-0731] p0340 NASA-30179
ANISOTROPY
Hybrid state vector methods for structural dynamic and aerelastic boundary value problems
[NASA-CA-3591] p0567 NASA-31304
AERIALLING
Effect of mechanical surface and heat treatments on erosion resistance
[AD-A110207] p0285 NASA-27071
AERIALLING REACTIONS
MT POSITION ABALILLATION
ANGULAR FLOW
A comprehensive method for preliminary design optimization of axial gas turbine stages
[AD-A110207] p0249 NASA-35091
Local heat transfer to staggered arrays of impinging circular air jets
[AD-A110211] p0247 NASA-35401
Experimental investigation of turbulenceelden heat transfer. Volume 2: Linear and annular cascade summary data sets
[AD-A110333] p0317 NASA-21200
Laser anemometer measurements in an annular cascade of core turbine vane and comparison with theory
[AD-A111682] p0407 NASA-26234
Correlation of these dimensional unsteady nonisothermal flow in the blade-free annular channel of a turboshaft --- military aircraft,
turbocompressors
[AD-A111682] p0592 NASA-23272
ANGULAR NOISES
Three-dimensional mean velocity and turbulence characteristics in the annular wall region of an axial flow compressor rotor passage
[AD-A111682] p0406 NASA-25252
AMPLIFICATION
Correlation of surface characterization of phosphoric acid anodize oxide with physical properties of bonded specimens
[AD-A111682] p0293 NASA-27437
Corrosion fatigue behaviour of some aluminium alloys
[AD-A111682] p0210 NASA-17365
ANOMALIES
MT GRAVITY ANOMALIES
MT MAGNETIC ANOMALIES
Elastic suspension of a wind tunnel test section
[AD-A111682] p0270 NASA-23363
ANTARCTIC ENVIRONMENT
U GEE ENVIRONMENT
AT SHEETABLE ANTENNAS
Study of the effects of maneuver compensation on beam pointing accuracy
[AD-A111682] p0072 NASA-14780
Broader bandwidth for this conformal antenna
[AD-A111682] p0154 NASA-19069
Analysis and tolerance study of an array antenna for a new generation of secondary radars
[AD-A111682] p0163 NASA-19521
Distributed airborne array concepts
[AD-A111682] p0242 NASA-31669
Outline of a multiple-access communication network based on adaptive arrays
[AD-A111682] p0390 NASA-34607
Antenna (selected articles)
[AD-A111682] p0269 NASA-19480
Conformal antenna array design handbook
[AD-A111682] p0322 NASA-21403
Modification of OR-255/URH Tactical Air Navigation
[AD-A111682] p0449 NASA-26266
Spiral slotted phased antenna array
[AD-A111682] p0476 NASA-27558
ANTENNA COUPLES
Airborne measurements with a sensitive high resolution 90 GHz radiometer
[AD-A111682] p0154 NASA-18940
ANTENNA CIRCUITS
MT COUPLING CIRCUITS
ANTENNA DESIGN

**ANTENNA THEORY AND DESIGN**

- Octave bandwidth dual polarized antenna p0020 AB2-12323
- Broader bandwidth for thin conformal antennas p0150 AB2-18936
- Selection of optimum antennas for tracking telemetry instrumented airborne vehicles p0357 AB2-27226
- Recent results in main beam nulling — aircraft antenna design

- General aviation aircraft antennas for the global positioning system p0553 AB2-43792
- Antenna (selected articles)
  - [AD-A108174] p0269 H22-19498
- Conformal antenna array design handbook p0322 H22-21403
- Spiral slotted phased antenna array p0876 H22-27558
- Advanced microstrip antenna developments. Volume 2: Microstrip GPS antennas for general aviation aircraft p0477 H22-27588
- Improved 243 MHz homing antenna system for use on helicopters (NLB-SP-01022-0) p0523 H22-20876

**ANTENNAs FIELD**

- **ANTENNA RADIATION PATTERNS**
  - Antenna theory and design — Book p0020 AB2-12323
  - Leaky wave antenna using an inverted strip dielectric waveguide — for aircraft application p0563 AB2-19552
  - Selection of optimum antennas for tracking telemetry instrumented airborne vehicles p0290 AB2-27226
  - Measuring LF and HF antenna radiation patterns by means of a helicopter p0391 H22-24772
  - Monopole antenna patterns on finite size composite ground planes — in aircraft p0518 AB2-41055
  - Recent results in main beam nulling — aircraft antenna design p0553 AB2-43792
- TM/TE polarization ratios in a sample of 30 kHz sferics received at altitudes from 0 to 70 km (AB-A108162) p0258 H22-18464
- Volumetric pattern prediction of antennas on aircraft using the geometrical theory of diffraction [ESA-TR-677] p0259 H22-18483
- Antenna (selected articles)
  - [AD-A108174] p0269 H22-19498
- G&T analysis of airborne antennas radiating in the presence of lossy dielectric layers [NAS-AE-168776] p0357 H22-22398
- Radar frequency radiation
  - [AD-A118552] p0411 H22-25423
- Elevation plane analysis of on-aircraft antennas [AD-A112373] p0450 H22-16695
- Near field analysis of airborne antennas [AD-A115074] p0561 H22-30463
- The effect of redose scattering on ECM antenna patterns [AD-A115517] p0561 H22-30463
- L-band DME multipath environment in the Microwave Landing System (MLS) approach and landing region [FAA-BD-02-19] p0586 H22-32330

**ANTENNAS**

- HT SPACECRAFT ANTENNAS
- HT SMART-SERIES ANTHENAS
- HT CYLINDRICAL ANTENNAS
- HT DISH OR PARABOLIC ANTENNAS
- HT DIRECTIONAL ANTENNAS
- HT HORN ANTENNAS
- HT LOOP ANTENNAS
- HT MONOPOLE ANTENNAS
- HT PARABOLIC ANTENNAS
- HT RADIATING ANTENNAS
- HT RADIO ANTENNAS
- HT SLOT ANTENNAS
- HT SPACECRAFT ANTENNAS
- HT SPHERICAL ANTENNAS

**ANTENNAS**

- HT BENT SHAMANTH ANTHENAS
- HT WAVEGUIDE ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN

**ANTENNAS**

- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS
- HT PHASED ARRAY ANTENNAS

**ANTENNAS**

- HT BASELINE ANTHENAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN

**ANTENNAS**

- HT TELESCOPE ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN

**ANTENNAS**

- HT BASELINE ANTHENAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN

**ANTENNAS**

- HT BASELINE ANTHENAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN

**ANTENNAS**

- HT BASELINE ANTHENAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
- HT SPACECRAFT ANTENNAS
- HT DESIGN
The DDE-based Azimuth System (/DAS/)

Boll response criteria for transport aircraft vith

The Flight Service Autonation System (FSAS) system

airborne data analysis/monitor system

In-flight investigation of large airplane flying

Evaluation of Loran-C enroute navigation and

Comparison of low-speed handling qualities in

A theoretical study of the impact of aircraft vake

vortices on roofs in the final approach area of

light aircraft

spectrally balanced chromatic landing approach

lighting system

[NASA-CASR-ARC-10990-1] p0188 Ab2-16059

Aircraft aerodynamic noise during approach

The use of groundspeed, in a wind shear and the

flight evaluation of a radar-altimeter-based

system for the measurement of groundspeed

[AD-A104756] p0087 Ab2-12060

The effect of visual information on manual

approach and landing

[IN-RP-B0019-9] p0087 Ab2-12064

Spectrally balanced chromatic landing approach

lighting system

[NASA-CASR-ARC-10990-1] p0193 Ab2-16801

APPLICATIONS PROGRAMS (COMPUTERS)

airborne data analysis/sensor system

modal characteristics of rotor blades: Finite

element approach and measurement by ground

vibration test

The Flight Service Autonation System (FSAS) system

benchmark. Volume 2: The model of the

application

[PSB-143546] p0466 Ab2-27270

APPROACH

NT AIRBORNE RADAR APPROACH

NT INSTRUMENT APPROACH

Minimum fuel horizontal flight paths in the

terminal area

The use of groundspeed, in a wind shear and the

flight evaluation of a radar-altimeter-based

system for the measurement of groundspeed

[AD-A104744] p0091 Ab2-14830

The effect of visual information on manual

approach and landing


spectrally balanced chromatic landing approach

lighting system

[NASA-CS1R-ARC-10990-1] p0188 Ab2-16059

Aircraft aerodynamic noise during approach

A theoretical study of the impact of aircraft vake

vortices on roofs in the final approach area of

Dusseldorf airport

[DFVLF-BKT-Z-82-01] p0371 Ab2-23560

Boll response criteria for transport aircraft with

advanced flight control systems in the landing

approach and touchdown

[IN-RP-B0103-9] p0410 Ab2-25265

APPROACH AND LANDING TESTS (AT)

Analysis of a longitudinal pilot-induced

oscillation experienced on the approach and

landing test of the space shuttle

[NASA-TB-81366] p0100 Ab2-13149

In-flight investigation of the effects of pilot

location and control system design on airplane

flight qualities for approach and landing

[NASA-CSR-16315] p0145 Ab2-15074

APPROACH CONTROL

NT RADAR APPROACH CONTROL

Comparison of low-speed handling qualities in

aircraft based and in-flight simulator tests

[IAIA PAPER 81-2478] p0059 Ab2-13934

Development of an MLS lateral autoland system with

automatic path definition

[IAIA PAPER 81-1751] p0062 Ab2-13933

Helical helicopter approaches with microwave

landing guidance system

[IAIA PAPER 81-2654] p0105 Ab2-16914

The MLS-based Autoland System \( /DAS/ \)

[DFVL-F-BKT-Z-81-12] p0123 Ab2-18146

Evaluation of Large-C envelope navigation and

econ-precision approaches within the State of

Vermont

[IAIA PAPER 81-2478] p0126 Ab2-18160

Game-theoretical method for the synthesis of

aircraft control during landing approach

[ANIA PAPER 81-1082] p0126 Ab2-18380

In-flight investigation of large airplane flying

qualities for approach and landing

[DFVL-F-BKT-Z-81-12] p0140 Ab2-15029

Design criteria for flightpath and airspeed

control for the approach and landing of STOL

aircraft

[NASA-TP-1911] p0305 Ab2-20187

Terminal area automatic navigation, guidance, and

control research using the Microwave Landing

System (MLS). Part 2: Transition path

reconstruction along a straight line path

containing a glide-slope change waypoint

[NASA-CS1R-ARC-10990-1] p0522 Ab2-25269

Effects of approach lighting and variation in

visible runway length on perception of approach

angle in simulated night landings

[AD-A114742] p0533 Ab2-25290

FIA acceptance tests on the navigation system

using time global positioning system 2 set

receiver

[DOE/IAA/ED-82/9] p0568 Ab2-31315

APPROACH INDICATORS

Experimental evaluation of a perspective tunnel

display for three-dimensional helicopter

approaches

[IAIA PAPER 82-1025] p0083 Ab2-15047

In-service testing of the Precision Approach Path

Indicator (PAPI) at Newark International

Airport, New Jersey

[DOE/IAA/ED-81/95] p0132 Ab2-14076

Requirements for independent and dependent

instrument approaches at reduced runway

spacing

[AD-A105673] p0132 Ab2-14080

FPD Programmable pilot-oriented display --- air

navigation

Flight-test verification of a pictorial tunnel

display for general aviation instrument approach

[NASA-TP-83305] p0452 Ab2-25280

Simulation report: Advanced display for complex

flight trajectories

[AD-A11252] p0457 Ab2-25280

APPROXIMATION OF

NT FINITE ELEMENT THEORY

NT FINITE ELEMENT METHOD

NT LEAST SQUARES METHOD

NT PDEF APPROXIMATION

NT BAYESIAN-KRIGING METHOD

NT RELATIONSHIP METHOD (MATHEMATICS)

Multivariable design: The optimization of

approximate inverses

[DOE/IAA/ED-82/9] p0303 Ab2-10057

Second order approximation theory of an arbitrary

aerofoil in compressible potential flow

[DOE/IAA/ED-82/9] p0302 Ab2-10062

Structural dynamics: Modified calculations ---

natural and harmonically excited vibrations of

modified structures; increased computation

efficiency

[BMG-FBM-81-1] p0101 Ab2-13457

Quasilinearization solution of the proportional

navigation problem

[AD-A113668] p0468 Ab2-27273

APPROXIMATION METHODS

0 APPROXIMATION

AQUEDUCT SOLUTIONS

Evaluation of three percent aqueous Fiji Pomon

Foam (APFF) concentrates as fire fighting agents

--- JP-4 jet fuel fires

[AD-A11082] p0411 Ab2-25402

ARC HEATING

Increased two of the Langley Room 7

Scramjet Test Facility
ABC IBDLIG
ABC IBDLIG
ABCBIIBCTOBB
ABCBABOLOGI
ABBA HAVIGAION
ABCTIC BBVIBOIBBBIS
HI PLASHA ABC »ELDING
HI GAS TUNGSTEN ABC »ELDING
0 ICE EHVIBOHBEHTS
HIAT onboard flight computer system architecture
and qualification
[AIAA 81-2120] p0001 AB2-10082
Airborne associative processor /ASPER/ --- for early warning radar surveillance, command, and control applications
[AIAA 81-2145] p0002 AB2-10104
An advanced programmable/reconfigurable color graphics display system for crew station technology research
[AIAA 81-2314] p0051 AB2-13516
Advanced weapon systems - Integration technology
--- Digital Avionic Information System
[AIAA 81-2120] p0053 AB2-13533
Advanced integrated CII architectures --- Communications, Navigation and Identification avionics for tactical aircraft and attack helicopters
[AIAA 81-2145] p0070 AB2-14763
APE automation - A look forward:
Technology/architecture
Discrete Address Beacon System /DABS/
A tutorial on distributed processing in aircraft/avionics applications
[AIAA 81-2320] p0196 AB2-17069
Economic considerations for real-time naval aircraft/avionics distributed computer control systems
[AIAA 81-2322] p0196 AB2-17097
Stage-state reliability analysis technique
[AIAA 81-2320] p0196 AB2-17104
Analysis of computing system configurations for highly integrated guidance and control systems
[AIAA 81-2319] p0363 AB2-23109
Electronic Warfare Avionic Integration Support Facility support processor
[AD-A111641] p0600 AB2-25249
At assessment of the real-time application capabilities of the SIFT computer system
[AIAA-TR-84462] p0613 AB2-25211
Computer architecture study for VTS5 simulators
[AD-A115621] p0564 AB2-30953
Design of a microprocessor-controlled linkage for simulator applications
[AD-A115621] p0564 AB2-30954
ARCTIC ENVIRONMENTS
U ICS ENVIRONMENTS
ARCTIC REGIONS
VTOL as it applies to resource development in the Canadian north
[AIAA PAPER 81-2640] p0156 AB2-19215
AREA NAVIGATION
Use of Space Shuttle technology in conventional aircraft
[AIAA 81-2176] p0002 AB2-10125
Discrete address beacon, navigation and landing system
[AIAA 81-2176] p0010 AB2-10650
Flight measurements of Area Navigation System performance using various combinations of ground aids and airborne sensors
[p0123 AB2-18134
Evaluation of Loran-C enroute navigation and non-procurement approaches within the State of Vermont
[p0124 AB2-18140
Phase evaluation of Loran-C for general aviation area navigation
[p0380 AB2-33049
Applications of a multiplexed GPS use set
[p0380 AB2-33050
Waystar - Global Positioning System: A revolutionary capability
[p0435 AB2-37040
NASA/PAAA Helicopter ABC simulation investigation of MNAV/BLI instrument approaches
[p0501 AB2-40535
Northeast corridor helicopter area navigation accuracy evaluation
[AD-A117445] p0606 AB2-33367
ARGENTINA
German-Argentine experiment: Vertical-rotor land engine
[p0951 AB2-12648
ARID (IMPACT PREDICTION)
1 COMPUTERIZED SIMILATION
2 IMPACT PREDICTION
ARITHMETIC
1 FLOATING POINT ARITHMETIC
ARMED FORCES
1 ARMED FORCES (FOREIGN)
ARMED FORCES (UNITED STATES)
ARMED FORCES (FOREIGN)
A proposed flight safety program for the Korean Air Force
[AD-A102373] p0025 AB2-10023
ARMED FORCES (UNITED STATES)
U.S. Marine Corps AT-8A maintenance experience
[AIAA PAPER 81-2657] p0482 AB2-38446
ARBOR
Transparent polyolefin film armor
[AD-A107562] p0213 AB2-17377
AROMATIC COMPOUNDS
The sooting tendency of fuels containing polycyclic aromatics in a research combustor
[AIAA PAPER 82-0299] p0164 AB2-19791
AHRATS
1 ANTENNA ARRAYS
2 EMPLOY ARRAYS
3 LEBAR ARRAYS
4 PHASED ARRAYS
5 SOLAR ARRAYS
6 STEERABLE ARRAYS
Local heat transfer to staggered arrays of impinging circular air jets
[ASME PAPER 82-GT-211] p0345 AB2-35401
ARRESTING GEAR
Test and evaluation of improved aircrew restraint systems
[AD-A107576] p0100 AB2-16056
Investigation of crossdeck pendant catapult slot interaction; proposed corrective measures
[AD-A106149] p0258 AB2-10232
ARROW WEBS
Effects of vortex flows on the low-speed aerodynamic characteristics of an arrow wing
[AIAA-TR-1918] p0033 AB2-11013
ARTIFICIAL CLOUDS
Helicopter Icing Spray System (HISS) nozzle improvement evaluation
[AD-A109405] p0264 AB2-19208
ARTIFICIAL SATELLITES
1 COMMUNICATION SATELLITES
2 GEOFODIC SATELLITES
3 NAVIGATION SATELLITES
4 WAYSTAR SATELLITES
5 RCA SATELLITES
6 SATS
7 SATS
8 NEO SATELLITES
9 ARTS
10 ABILITY
11 RYLS COMPOUNDS
12 RYLS COMPOUNDS
ASBESTOS
Replacement of aboard naval aircraft
[p0500 AB2-32356
ASCENT
1 CLIMBING FLIGHT
2 ASPECT RATIO
3 HIGH ASPECT RATIO
4 LOW ASPECT RATIO
5 Irreducible emissions from tuberoloids with b, p aspect ratio nozzles
[p0103 AB2-16092
Secondary flow effects and mixing of the wake behind a turbine stator
[AIAA PAPER 82-GT-46] p0422 AB2-35304
Development and application of a performance prediction method for straight rectangular diffuser
[ASME PAPER 82-GT-122] p0425 AB2-35352
A-82

The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade [NASA-TP-1504] p0139 862-15017

Performance of single-stage axial-flow transonic compressor with rotor and stator aspect ratios of 1.61 and 1.78, respectively, and with design pressure ratio of 1.82 [NASA-TP-1974] p0266 862-15222

A summary of experimental data on wing characteristics at transonic speeds [ARAB-001-1953-S.] p0312 862-2155

Low-speed measurements of the static pressure distribution and overall forces on a cascade and a symmetric mild gable wing of aspect ratio 1.4 --- in a wind tunnel [NASA-TH-80066] p0312 862-21161

ASSEMBLES

ST TAIL ASSEMBLES

ASSEMBLY
Assembly of aircraft instruments. Russian book [P0434 862-36950

The technology of the assembly of engines for flight vehicles. Russian book [P0578 862-45765

ASSESSMENTS

AT DAMAGE ASSESSMENT
ST TECHNOLOGY ASSESSMENT
Reduced performance and increased cost warrant reevaluation of the multiple stores ejector rack. [AD-4112776] p0469 862-27285

ASTRONOMY

Astronomy requirements for future navigation systems [P022 862-12637

ASTRONOMICS

Studies in the history and theory of development of aviation and rocketry and space science and technology. Russian book [P0291 862-23798

Romanian professor Elie Carafola - 55 years devotion on modern aeronautics and astronautics [JAF PAPBB 802-280] p0563 862-67010

ASTROPHYSICAL SPECTROSCOPY

The station to forty micro spectroscopy from the Baja Llara Jet [NASA-CH-168668] p0310 862-21054

ASTROLOGY

ST TAI RASTRONOMY
Journal of Aeronautics and astronomy [AD-4109611] p0301 862-20140

ASYMPTOTIC METHODS

A stable decentralized filtering implementation for JPL'S Heiava --- stable community relative navigation [P0124 862-18156

Torsional vibrations of a wing carrying a concentrated load. Asymptotic behavior [P0120 862-18620

The stability of maneuverable flight vehicles [P0133 862-29827

Evaluation of an asymptotic method for helicopter rotor analysis [P0495 862-60509

Asymptotic theory of separated flow past low-aspect-ratio wings [P0581 862-46135

Helicopter rotor loads using a matched asymptotic expansion technique [NASA-TP-165742] p0312 862-21156

ATMOSPHERIC ELECTRICITY

Cascade converter of dc voltage to ac voltage of higher frequency with voltage and frequency stabilization devices. Aircraft electric equipment [P0236 862-28875

AVIATION

U-180 JET ENGINES
ATLANTIC OCEAN
Meteorological aspects of North Atlantic flight

A-83
The influence of turbulence models on computer-simulated aircraft landing

Aircraft parameter identification in the presence of atmospheric turbulence

The role of the scale parameter in service load assessment and simulation -- of aircraft flight

Laser pointing in a turbulent atmosphere

Turbulence and wind shear experiments related to aircraft operation in the terminal area

Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts

ATMOSPHERIC ELECTRICITY

Lightning and temperature database for flight planning

Lightning/aircraft interaction event simulation

Aircraft response for use in turbulence assessments and forecast

Aircraft parameter identification in the presence of atmospheric turbulence

Lightning/aircraft interaction event simulation

Laser pointing in a turbulent atmosphere

Turbulence and wind shear experiments related to aircraft operation in the terminal area

Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts

ATMOSPHERIC PHYSICS

Aircraft and vehicle-induced electrical effects

Aircraft response for use in turbulence assessments and forecast

Aircraft parameter identification in the presence of atmospheric turbulence

Lightning/aircraft interaction event simulation

Laser pointing in a turbulent atmosphere

Turbulence and wind shear experiments related to aircraft operation in the terminal area

Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts

ATMOSPHERIC PRESSURE

A criterion for determining the causes of wind shear at Punta Raisi airport, on the basis of statistical data from barograph records

The interaction of radio frequency electromagnetic fields with atmospheric water droplets and applications to aircraft ice prevention

A-84

A-90
Automated Pilot Advisory System

Scenario for evolution of air traffic control

Automated Pilot Advisory System

The automation route forecast /MPS program - An interactive system for pilot self-briefing --- of meteorological information

Automated Pilot Advisory System

Comparison between the surveillance performances

Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS) - Part 2: NAV/MLS transition problems for aircraft

Automated Pilot Advisory System

Comparison between the surveillance performances

Automated Pilot Advisory System

Comparison between the surveillance performances

Automated Pilot Advisory System

Comparison between the surveillance performances

Automated Pilot Advisory System

Comparison between the surveillance performances

Three-engine control system for the prototype RP-101 helicopter

Rational production methods for the manufacture of helicopter rotor blades --- 80-105 helicopter

Hydraulic actuator mechanisms to control aircraft spoiler movements through dual input commands

Quasilinearization solution of the proportional navigation problem

Analysis of new glidepath and speed control autopilot concepts for a powered lift STOL aircraft

Automatic Control

Automatic parachute releasers for premeditated parachuting

Self-streamlined wind tunnels without computers

The United States Air Force Automated Vibration Diagnostics System /AVID/ for improved jet engine maintenance

Design principles of a computer-aided design system

Estimation of the performance of nonstationary discontinuous control systems for flight vehicles

British aerospace begins update effort

Concept demonstration of automatic subsystem parameter monitoring --- military helicopter cockpit instrumentation

Control of the operations of a 'flight complex' --- Russian on ground installations to aid air and space navigation

The automation of processes for producing aircraft engines /2nd revised and enlarged edition/ --- Russian book

Application of nonlinear systems inverses to automatic flight control design: System concepts and flight evaluations

Sensor failure detection system --- for the F100 turbofan engine

Electronic master monitor and advisory display system, operational feedback report

Integrated Control of mechanical system for future combat aircraft

Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS) - Part 2: NAV/MLS transition problems for aircraft

Automatic Flight Control

Automatic Flight Control

Terminal System (MLS). Part 2: BHAV/MLS transition

Autoh&TIC DATA PBOCBSSIHG

ADTOHAIC COBTBQL ?*L¥BS

HI PBESSDBE BBGOLATOBS

HT AUTOMATIC LAHDING COHTBOL

D4T4 PBOCBSSIHG

AUTOH4TIC FLIGHT COITBOL

Bave we overlooked the pilot's role in an F/A-18A weapon system - 1976 state of the art

Digital control for flexible aircraft using reduced order models

F/A-18A weapon system - 1976 state of the art

Application of the concept of dynamic trim control and nonlinear system inverses to automatic control of a vertical attitude takeoff and landing aircraft

Have we overlooked the pilot's role in an automated flight deck

Direct digital drive actuation

Higher order information transfer system conceptual design

Electromechanical actuation development program

Integrated Flight/Weapon control design and evaluation

Parallel processing applied to digital flight control systems - Some perspectives

Microprocessor flight control application study

A synthesis technique for highly uncertain and interacting multivariable flight control systems

Flight crew management and cockpit performance systems

Automatic controlled terrain following flights

Digital avionics - Advances in maintenance design

Operational and performance aspects of fuel management in naval aircraft

The F52 BAB Bedford civil flight research programme --- on components and system integration for optimum TTC

Thrust management - Current achievements and future developments

The effects on simulators of advances in aircraft technology
The simulation study on a redundant flight control system
A preliminary investigation of Individual Blade-control Independent of a Stabilometer [AIAA 82-22120]
Advanced technology FDCS control panel for the L-1011-500 [AIAA PAPER 81-2240]
Automation of the synthesis of control in a stationary linear system for aircraft flight control [AIAA 82-29000]
Lightning simulation and testing [AIAA 82-34464]
Formal specification and mechanical verification of SIFT — A fault-tolerant flight control system [AIAA 82-37446]
Rotor state estimation for rotorcraft [AIAA 82-37788]
FMC — A commercial flight management computer system [AIAA 82-1515]
The use of differential pressure feedback in an automatic flight control system [AIAA 82-1596]
Aiming at the pitfalls in automatic landing control system design [AIAA 82-1599]
Primary-data devices — Russian book [AIAA 82-39279]
Electronic stabilisation of an aircraft [AIAA 82-39321]
The fourth dimension — flight management system for marine operations [AIAA 82-39540]
A terrain following system, an algorithm and a sensor [AIAA 82-39740]
Flight control systems for aerial targets [AIAA 82-39745]
Boeing's new 767 eases crew workload [AIAA 82-40348]
Air experience with a backup-control flight control system for the HENS research vehicle [AIAA 82-40929]
A concept for 4D-guidance of transport aircraft in the TMA — Terminal Maneuvering Area [AIAA 82-40942]
Reduced nonlinear flight dynamic model of elastic structure aircraft [AIAA 82-41009]
Investigations concerned with shifting pilot activation to a higher hierarchical stage of flight control — German thesis [AIAA 82-41453]
Automation of flight operational control in the German Democratic Republic [AIAA 82-42574]
The flight management computer [AIAA 82-42762]
Agila — Robot eye in the sky [AIAA 82-48025]
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS) [AIAA 82-41071]
An investigation of automatic guidance concepts to steer a VTOL aircraft to a small aircraft facility ship [AIAA 82-41092]
Automation of on-board flightpath management [AIAA 82-41094]
A program to evaluate a control system based on feedback of aerodynamic pressure differentials [AIAA 82-16089]
A control model for maneuvering flight for application to a computer-flght testing program [AIAA 82-16166]
A translational velocity command system for VTOL low-speed flight [AIAA 82-21153]
Enhanced piloting control through cockpit facilities and L.C.T. [AIAA 82-22016]
Integrated navigation-TF/TA-system based on stored terrain data processing [AIAA 82-22195]
Boeing 230 flight control development [AIAA 82-23211]
Some piloting experiences with multifunction isometric side-arm controllers in a helicopter [AIAA 82-23218]
Flight management computer [AIAA 82-23215]
Production of Reliable Flight Control Software: Validation Methods Research for Fault Tolerant Avionics and Control Systems Sub-Working Group [AIAA 82-24048]
Integrated flight trajectory control [AIAA 82-24045]
Minimum operational performance standards for automatic direction finding (ADF) equipment [ETCA/DO-179]
Applications to aeronautics of the theory of transformations of nonlinear systems [AIAA 82-28270]
Pilot opinions of sampling effects in lateral directional control [AIAA 82-30013]
The B-777 flight control system maintenance and reliability data base for cost effectiveness tradeoff studies [AIAA 82-32275]
AUTOMATIC GATE CONTROL
Automatic digital gain raising — for flight test telemetry data [AIAA 81-2370]
Joint University Program Air for Transportation Research, 1981 [AIAA 82-2224]
A Loran-C prototype navigation receiver for general aviation [AIAA 82-24199]
Commutated automatic gain control system [AIAA 82-26209]
Voice Interactive Systems Technology Avionics (VISTA) Program [AIAA 81-22180]
AUTOMATIC LANDING CONTROL
Joint Tactical Microwave Landing System /JTHLS/ airborne signal processing (AATLS) [AIAA 82-2247]
Applications of head-up displays in commercial aircraft [AIAA 82-2300]
Development of an AILS lateral autoland system with automatic path definition [AIAA 81-1751]
AR/TPS-25 and AR/GPS-22 precision approach radars [AIAA 82-14856]
Development of a digital integrated automatic landing system /DIALS/ for steep approach and landing [AIAA 82-14929]
Evaluation of automated descent rate control systems [AIAA 82-14927]
Development of an MLS with computer aided landing approach [AIAA 82-13522]
Development and evaluation of automatic landing control laws for light wing landing STOL aircraft [AIAA 82-16160]
R/SLS vertical guidance and navigation for a STOL airplane landing on an elevated STOLport [AIAA 82-13388]
AIS and SPS 95 automated microwave landing system (MSL) [AIAA 82-14101]
Terrestrial area automatic navigation, guidance, and control research using the Microwave Landing System (MLS). Part 3: A comparison of waypoint guidance algorithms for RNAV/MLS transition ([AIAA 82-21152]
AIS and SPS 95 automated navigation, guidance, and control research using the Microwave Landing System (MLS). Part 4: Transition path reconstruction along a straight line path containing a glide slope change waypoint ([AIAA 82-28018]
AUTOMATIC PATTERN RECOGNITION
0 PATTERN RECOGNITION
A-87
AUTOMATIC PILOTS

The design of exact nonlinear model followers --- with application to trajectory autopilot for helicopter

A gust dumper --- for light passenger aircraft

Electronic stabilization of an aircraft

The control and guidance unit for NASA's

Designs and flight testing of a digital optimal control general aviation autopilot

Simulated ILS using a laser tracker

Electronic stabilization

Information technology and its impact on test and Commercial BBS considerations for small gas
gust response of commercial jet aircraft including
Optimization of auto-pilot equations for rapid estimation of helicopter control settings

Gust response of commercial jet aircraft including effects of autopilot operation

Analysis of several glidepath and speed control autopilot concepts for a powered lift STOL aircraft

AUTOMATIC ROCKET IMPACT PREDICTORS

U COMPUTERIZED SIMULATION

U IMPACT PREDICTION

AUTOMATIC TEST EQUIPMENT

Air supply system kite for Boeing 767 airplane --- Built-In-Test-Equipment

Commercial EMS considerations for small gas turbine engines --- automated engine monitoring systems

Information technology and its impact on test and evaluation at the Naval Air Test Center

Automated radome performance evaluation in the Radio Frequency Simulation System /RFSS/ at MICON

AUTOPROCOM '80; International Automatic Testing Conference, Washington, DC, November 2-5, 1980, Proceedings

Airline maintenance strategy

Airline ATE requirements

The role of software in commercial ATE

The modular ATE --- for cost effective maintenance of new generation avionics

AWS - Realistic not futuristic --- an advanced Electronic Warfare Test Set

ATE logistics in the United States Air Force

ATLAS/test data provision for the Tornado MTS - a challenging task

Naval Air Systems Command /NAFAIR/ ATE program - Standardized ATE for the carrier environment

Configuration management techniques for automatic testing

Pacer Comet II jet engine test system

Automated ultrasonic inspection of adhesive bonded structure

A laboratory mock-up ultrasonic inspection system for composites

A simple, low cost application of a flight test parameter identification system

Analysis of built-in-test accuracy

Computer Monitor© Inspection Program /CMI/, a key to increased aircraft and personnel productivity

Subject Index

AERIAL HUMILIATED PILOTS

Variation test procedures for accessory angle drive gearboxes on Atar 09C engines --- turbojet engines

BOLI computers in the flight testing of the Fokker P25 aircraft

Aircraft interrogation and display systems: A ground support equipment for digital flight systems

AircraftTEAP-AUTOMATICO "87170"

AUTOMATIC TRAFFIC ADVISORY AND RESOLUTION

Conflicts between random flights in a given area

Estimation of the number of in-flight aircraft on instrument flight rules

AUTOMATIC WEATHER STATIONS

A modular automated approach to airfield weather systems

The Modular Automated Weather System (MAWS) concept --- airfield weather support

AUTOMATION

Automated Paint and Process Line /APPFL/ --- for aircraft production

Automation in flight simulation of data handling and validation testing

Automating air-traffic control

Problems in the automation of the thermal-stress analysis of flight vehicles

Automation of flight operational control in the German Democratic Republic

AUTOMOBILE ENGINES

Future auto engines - Competition heats up

Ceramic components for automotive and heavy duty turbine engines - CATS and AET 100

Cold-air performance of a 15.41-tip-diameter axial-flow power turbine with variable-area stator designed for a 75-kW automotive gas turbine engine

Preliminary results on performance testing of a turboccharged rotary combustion engine

AUTOMOBILE FUELS

HY LIQUID FUELS

Technological innovation for success - Liquid hydrogen propulsion

AUTOMOBILES

HY ELECTRIC AUTOMOBILES

Aerodynamic effects of shape, canard, pitch, and ground proximity on idealized ground-vehicle bodies

Slotted vail test section for automotive aerodynamic test facilities

(AIAA 82-0585)

AUTOPILOTS

U AUTOMATIC PILOTS

AUTOTESTATION

An evaluation of helicopter autorotation assist concepts

AUXILIARY EQUIPMENT (COMPUTERS)

HY FLOTTERS

HY PRINTERs (DATA PROCESSING)

HY POWER SOURCES

HY SAP

A new AFP for media place aircraft environmental control systems

An evaluation of helicopter autorotation assist concepts

Electric Flight Systems

Electric Flight Systems, overview
Protection of electrical systems from EM hazards:

AVOIDANCE

Design guide

Protection of electrical systems from EM hazards:

Evaluation of lightning simulation test techniques, part I

Protection of electrical systems from EM hazards:

Electronic/electric technology benefits study ---

Protection of electrical systems from EM hazards:

General aviation activity and aviation survey

Protection of electrical systems from EM hazards:

Advanced aircraft electrical system control
tech Project. Phase 1: Analysis and
determination of fault tolerant aircraft electronic systems

Subjects:

Tunnel-to-tunnel correlation

Performance of single-stage axial-flow transonic
compensator with rotor and stator aspect ratios

Survey on the effect of blade surface roughness on
compensator performance

Results of calculations

The through flow calculations

Evaluation of profile loss predictions based on
diffusion factors

Axial-flow turbomachinery through flow calculation
methods

Performance of single-stage axial-flow transonic
compensator with rotor and stator aspect ratios of 1.63 and 1.77,
respectively, and with design pressure ratios of 2.05

Tunnel-to-tunnel correlation

STGSK: A computer code for predicting multi-stage
axial flow compressor performance by a streamline
stage stacking method

Investigation of the tip clearance flow inside and
at the exit of a compressor rotor passage

NUMERICAL STABILITY ANALYSIS OF A COMPRESSOR MODEL

AERIAL FLOW COMPRESSORS

U TURBOCOMPRESSORS

AERIAL FLOW TURBINES

Dynamic response of blades and vanes to wakes in
axial turbomachinery

SECONDARY FLOW AND LOSES IN AXIAL FLOW TURBINES

A comprehensive method for preliminary design
optimization of axial gas turbine stages

On the influence of the number of stages on the
efficiency of axial-flow turbines

The use of optimization techniques to design
controlled diffusion compressor blading

Numerical calculation of the flow in a compressor
and turbine cascades --- German thesis

Development of high loading, high efficiency axial
flow turbine

An aerodynamic design and the overall stage
performance of an air-cooled axial-flow turbine

The use of optimization techniques to design
turbine controlled diffusion compressor blading

Through flow calculations in axial turbomachines

Influence of correlations and computational
methods on the prediction of overall efficiency

The two stage aero engine turbine

Part span damper loss prediction for transonic
axial fan rotors

Axial compressor stall and surge

Summary of answers to the questionnaire

Single stage transonic compressor and equivalent
plane cascade

Axial-to-blade computations and boundary layer
corrections in axial compressors and turbines

An experimental study of the effects of an inlet
flow conditioner on the noise of a low speed
axial flow fan --- in an aircraft engine

Research on turbine rotor-stator aerodynamic
interaction and rotor negative incidence stall

Aerodynamics of advanced axial-flow turbomachinery

Rotor tip clearance effects on overall and
blade-element performance of axial-flow
transonic fan stage

AXIAL LOADS

Fracture and fatigue characterization of aircraft
structural materials under biaxial loading

AXIAL STRAIN

Improving composite bolted joint efficiency by
laminated tailoring

Investigation of compaction criteria for
airport pavement subgrade soils

AXIAL STRESS

Crack growth evaluation of a method to convert
real-time loads history to a simplified
engineering spectra --- for aircraft structural
analysis

AXILASTRICAL SHEAR

The analysis of the thermal-mechanical stress
conditions in axisymmetric rotating hot
components of /aircraft/ gas turbines --- German thesis

A-92
BASE PRESSURE

(4 AIAA PAPER 82-1001) p0375 A82-31960
BASE PRESSURE
A method of predicting fuselage loads in hover
p0250 N82-18164
BASES (FOUNTAIN)
U FOUNTAIN
BAYTANKERS
The Hydrographic Airborne Laser Sounder (HALS)
[AD-A111027] p0460 N82-26660
BAYTANKER
U BAYTANKERS
BATTERY SEPARATORS
U SEPARATORS
BCAS
U BEACON COLLISION AVOIDANCE SYSTEM
BEACON COLLISION AVOIDANCE SYSTEM
Air-air collision avoidance systems
Analysis of a nonlinear altitude tracking method
[AD-A106878] p0263 N82-19197
Active Beacon Collision Avoidance System (BCAS)
logic performance during operational flight tests
[AD-A106853] p0204 N82-19203
Analysis of Active BCAS alert rates and protection
based on actual aircraft tracks
[AD-A116402] p0968 N82-31319
BEACONS
MT DISCRETE ADDRESS BEACON SYSTEM
MT BADA BEACONS
MT RADIO BEACONS
MT RADIO FINDER
Digital detection and processing of laser beacon
signals for aircraft collision hazard warning
[AD-A1-2128] p0052 A82-43525
Hide field of view laser beacon system for three
dimensional aircraft range measurements
[AD-A116402] p0493 N82-526216
BEAM WAVEMODER
Leaky wave antenna using an inverted strip
dielectric waveguide —— for aircraft applications
p0163 A82-20552
BEAMS (RADIATION)
MT LIGHT BEAMS
MT HABER BEAMS
Recent results on main beam nulling —— aircraft
antenna design
p0553 A82-63792
BEAMS (SUPPORTS)
MT BOX BEAMS
MT CANTILEVER BEAMS
MT RECTANGULAR BEAMS
Linear decentralized systems with special structure
——— for twin lift helicopters
p0388 A82-34359
Matrix analysis of wings
p0382 A82-10998
BEARINGS
U COLLIMATION
BEARING (DIRECTION)
System for providing an integrated display of
instantaneous information relative to aircraft
attitude, heading, altitude, and horizontal
situation
[NASCA-CASE-PBC-11005-1] p0189 N82-16075
BEARINGLESS ROTORS
Dynamic stability of low effective flap hinge BHR
concepts
p0277 A82-26377
The YAH-64A composite flexible tail rotor
p0278 A82-26386
Evaluation of the effect of elasto-structural damping
mechanism on the stability of a bearingless main
rotor system
p0280 A82-26394
An experimental investigation of a for bearings
model rotor in hover
p0498 A82-60512
Finite element analysis for bearingless rotor
blade aeroelasticity
p0499 A82-40517
Correlating measured and predicted increased
stability characteristics for an advanced
bearingless rotor
[NASA-CR-166280] p0201 N82-17154
BEARINGS
MT ANTIPRIBERION BEARINGS
MT BALL BEARINGS
MT FOIL BEARINGS
MT GAS BEARINGS
SUBJECT INDEX

NT JOURNAL BEARINGS
NT ROLLER BEARINGS
Solution to a bistable vibration problem using a
plaa, uncontrolled squeeze film damper bearing
[ASME PAPER 82-GT-281] p0430 A82-35455
Engine dynamic analysis with general nonlinear
finite element codes. II - Bearing element
implementation, overall numerical
characterization and benchmarking
[ASME PAPER 82-GT-292] p0430 A82-35462
Comparison of HP turbine "deep blade design"
effects in turboshaft engine gas generators with
different bearing structure configurations
p015 A82-40596
Aeroelastic analysis of the elastic global rotor
[NASA-CR-166287] p0312 A82-21157
The vibratory behavior of a rotating propeller
shaft. Part 4: Vibration tests of a rotating
propeller shaft in a rubber stern tube bearing
——— ship propellers
[NVHC-507228-81-F1] p0398 A82-24514
Subsynchronous vibrations of rotor systems
p0096 A82-32528
Labyrinth seal effects on rotor bearing systems
stability
[AD-1167743] p0599 A82-32742
Engine dynamic analysis with general nonlinear
finite element codes. Part 2: Bearing element
implementation overall numerical characterization
and benchmarking
[NASA-CR-167494] p0620 A82-33930
BEACON-SEA (BROKEN AMERICA)
United States Coast Pilot 9. Pacific and Arctic
Coasts Alaska: Cape Spencer to Beaufort Sea
p0294 A82-18201
BEACH AIRCRAFT
U BEACON AIRCRAFT
BEACON AIRCRAFT
Aircraft accident report — Universal Airways,
Inc., Beach 65-460 adulte Conversion, #1001,
near Midland, Texas, July 2, 1981
[WSBR-AAR-05-17] p0199 A82-17138
BEHAVIOR
NT HUMAN BEHAVIOR
BALL AIRCRAFT
MT OH-13 HELICOPTER
MT OH-1 HELICOPTER
MT X-14 AIRCRAFT
MT XV-15 AIRCRAFT
BELLOWS
Low maintenance hydraulic accumulator
[AD-A103947] p0027 A82-10034
BENCH
U SEATS
BENDING
NT ELASTIC BENDING
BENDING FATIGUE
Matrix analysis of wings
p0032 A82-10998
BENDING LOADS
Measuring flexural loads by means of strain
transducers
p0562 A82-46619
A method for applying linear optimal control
to the design of a regulator for a
flexible aircraft —— improving riding quality
in fighter aircraft
[MLE-T8-80032-0] p0265 A82-19212
The lateral response of an aircar to turbulence
[AD-A115197] p0599 A82-30312
BENDING THEORY
The stability of monocoque panels under bending
p0336 A82-29836
BIAS
NT RESPONSE BEAS

BIBLIOGRAPHY
Selected bibliography of NASA/NASA aircraft icing
publications [NASA-T8-1651] p0305 A82-11053
Index of National Aviation Facilities Experimental
Center technical reports 1972 - 1977
[AD-A104759] p006 A82-12056
Compilation of abstracts of dissemination items,
and research papers submitted by candidates for
degrees, 1 October 1979 - 30 September 1980
[AD-A104128] p010 A82-13974
Fiscal year 1961 scientific and technical reports,
articles, papers, and presentations
[ASME-T8-82465] p0195 A82-16927
Bibliography of NASA published reports on general aviation, 1975 to 1981
[BIBD-ABICBAJ-T COLLISIONS]

Bibliography of Lewis Research Center technical publications announced in 1981
[BIBD-ABICBAJ-T COLLISIONS]

Cockpit display of traffic information and the measurement of pilot workload: An annotated bibliography

[AD-A110937] p0670 B-22791

Laminar flow control, 1976 - 1982: A selected annotated bibliography

[NASA-TN-84946] p0572 B-31645

Cryogenic wind tunnels: A selected, annotated bibliography

[NASA-TN-84974] p0611 B-33405

USAF Summer Faculty Research Program. Volume 1: 1981 research reports

[AD-A113708] p0615 B-34340

USAF Summer Faculty Research Program. Volume 2: 1981 research reports

[AD-A113709] p0615 B-34341

RESEARCH (MATHEMATICS)

U BRANCHING (MATHEMATICS)

BILLET

Lucas stretched acrylic

p0227 A-2-24318

BIMAR DATA

A binary matrix technique for aircraft collision threat recognition and avoidance

[AIAA PAPER 82-0164] p0416 B-17828

BIMAR MIXTURES

MT UTILITY ALLOYS

BIMAR SYSTEMS (DIGITAL)

U DIGITAL SYSTEMS

BIMAR SYSTEMS (MATHEMATICAL)

MT UTILITY ALLOYS

BINDERS (ADHESIVES)

BLOOMING


[AD-A116149] p0601 B-33153

USAF bioenvironmental noise data handbook. Volume 162: AD-480 generator set

[AD-A116150] p0601 B-33153

USAF bioenvironmental noise data handbook. Volume 163: GPC-26 compressor

[AD-A116151] p0601 B-33153

USAF bioenvironmental noise data handbook. Volume 164: AD-1 heater, duct type, portable

[AD-A116152] p0602 B-33159

USAF bioenvironmental noise data handbook. Volume 165: AC-1 heater, duct type, portable

[AD-A116153] p0601 B-33153

USAF bioenvironmental noise data handbook. Volume 167: Aircraft air conditioner

[AD-A116154] p0602 B-33159

USAF bioenvironmental noise data handbook. Volume 168: AP-3 tenter, pressurized cablot leakage, aircraft

[AD-A116155] p0602 B-33163

USAF bioenvironmental noise data handbook. Volume 158: F-106A aircraft, near and far-field noise

[AD-A116930] p0602 B-33168

BIOEROSION

The biological degradation of Spilled jet fuels: A literature review

[AD-A110758] p0661 B-26087

BIOETRACIES

Investigation of aircraft protection during emergency escape at dynamic pressures up to 1600 q

[AD-A117552] p0605 B-33359

BIOGRAPHY

Romanian professor Elie Carafoli - 55 years devotion on modern aeronautics and astronautics

[IAE PAPER 82-280] p0583 B-47010

Aerospace engineers: We're tomorrow-minded people


BIOLOGY

An airline view of the corrosion problem

[AD-A117554] p0611 B-33356

BIOCHEMICS

U BIOCHEMICS

BIREPLANTS

U LIQUID ROCKET PROPULSANTS

BIRD-AIRCRAFT COLLISIONS

Transparencies - What an aircraft designer should know

p0227 A-2-24305

An analytical methodology to predict potential aircraft losses due to capsised hardtrikes

p0227 A-2-24313

The role of finite element analysis in the design of birdstrike resistant transparencies

p0227 A-2-24314

Airframe transparency bird impact analysis using the NASA computer program

p0227 A-2-24315

The effects of hard orientation on load profile and damage level

p0227 A-2-24316

Bird impact analysis package for turbine engine fan blades

[AIAA 82-0696] p0339 B-30162

Primary sewage treatment plant as a source of bird hazards at airport

p0382 A-2-33523

BIRDS

MT PIGIONS

Primary sewage treatment plant as a source of bird hazards at airport

p0413 B-2-26184

BIT SYNCHRONIZATION

Synchronous fault-tolerant flight control systems

[AIAA 81-2109] p0001 B-10083

BLACKOUT (PROPAGATION)

MT ATMOSPHERICS

MT ELECTROMAGNETIC NOISE

MT WHISTLES

BLADES SLAP NOISE

Model helicopter rotor impulsive noise

p0513 A-2-11300

The prediction of helicopter rotor diameter frequency noise

p0503 A-2-80553

A semimechanical high-speed rotor noise prediction technique

p0503 A-2-80554

Dynamic surface measurements on a model helicopter rotor during blade slap at high angles of attack

p0503 A-2-80555

Helicopter model scale results of blade-vortex interaction impulsive noise as affected by blade phasing

p0503 A-2-80556

BLADE TIPS

Propeller tip vortex - A possible contributor to aircraft cabin noise

p0113 A-2-17603

Helicopter rotor performance improvement by utilization of swept back parabolic blade tips

p0276 B-2-26298

Performance improvements with the free-tip rotor

p0279 A-2-26387

Fan energetics of compressor blade tip seals

p0285 B-2-27078

Turbine blade nonlinear structural and noise analysis

p0415 A-2-39991

Casing wall boundary-layer development through an isolated compressor rotor

[AIAA PAPER 82-1056] p0548 B-39991

Effect of impeller extended shroud on centrifugal compressor performance as a function of specific speed

[AIAA PAPER 82-GF-228] p0428 A-2-39511

Optical tip clearance sensor for aircraft engine controls

[AIAA PAPER 82-1131] p0438 B-2-37691

Effect of tip vane on the performance and flow field of a rotor in hover

p0496 B-2-60511

An examination of helicopter blade profiles and tips


Experimental and analytical studies of a model helicopter rotor in hover

[p0605 B-12062

Wind-tunnel investigation of the effects of blade tip geometry on the interaction of torsional loads and performance for an articulated helicopter rotor

[AIAA PAPER 82-GF-18] p0420 B-2-35287

Roll up model for rotor wake vortices, part 5

[AD-AI16148] p0615 B-33157

Prediction of blade vortex interaction noise from measured blade pressure

p0248 B-2-18167
The problem of calculation of the flow around helicopter rotor blade tips

As analytical investigation of the free-tip rotor for helicopters

On the calculation of transonic blade tip flow for helicopter rotors

CF6 Jet Engine Diagnostics Program: High pressure compressor clearance investigation

Helirotor blade performance improvement by utilization of swept-back parabolic blade tip --- wind tunnel tests

The problem of calculation of the flow around helicopter rotor blade tips --- and adapting computer programs

Program presentation of the working group separated flow: Problems with rotary wings

Blade tip gap effects in transonic flows: A review

Cone compressor exit stage study, volume 6

Investigation of a rotor system incorporating a constant lift tip

Multistage axial compressor program on tip clearance effects

Rotor tip clearance effects on overall and blade-element performance of axisymmetric transonic fan stage

BLAST LOADS

Damage from High explosive (HE) projectiles

Gunfire blast pressure predictions

BLEED-OFF U PRESSURE REDUCTION

BLEED U BREATHERS

BLOCKING

Blockage and flow studies of a generalized test apparatus including various wing configurations in the Langley 7-Inch Mach 7 Pilot Tunnel

BLOWDOWN WIND TUNNELS

Adaptation and first cryogenic operation of T2 ONERA/CENT wind tunnel

Application of laser velocimetry to large industrial wind tunnels

Research on an induction driven cryogenic wind tunnel

Induction driven transonic wind tunnel: Operation at room temperature and cryogenic adaptation

BLOWERS

Study of the de-icing properties of the ASDE-3 rotodose

BLOWING

Effect of crossflows on the discharge coefficient of fuel cooling holes

Development of an advanced no-moving-parts high-lift airfoil

Wing-tip jets aerodynamic performance

Aerodynamic analysis of VTOL inlets and definition of a short, blowing-tip inlet

Experimental and analytical results of tangential blowing applied to a subsonic V/STOL inlet

BLOW FLAPS U EXTERNALLY BLOW FLAPS

BLUFF BODIES

Aerodynamic effects of shape, camber, pitch, and ground proximity on idealized ground-vehicle bodies

SUBJECT INDEX

BLAST LOADS

The problem of calculation of the flow around helicopter rotor blade tips

As analytical investigation of the free-tip rotor for helicopters

On the calculation of transonic blade tip flow for helicopter rotors

CF6 Jet Engine Diagnostics Program: High pressure compressor clearance investigation

Helirotor blade performance improvement by utilization of swept-back parabolic blade tip --- wind tunnel tests

The problem of calculation of the flow around helicopter rotor blade tips --- and adapting computer programs

Program presentation of the working group separated flow: Problems with rotary wings

Blade tip gap effects in transonic flows: A review

Cone compressor exit stage study, volume 6

Investigation of a rotor system incorporating a constant lift tip

Multistage axial compressor program on tip clearance effects

Rotor tip clearance effects on overall and blade-element performance of axisymmetric transonic fan stage

BLAST LOADS

Damage from High explosive (HE) projectiles

Gunfire blast pressure predictions

BLEED-OFF U PRESSURE REDUCTION

BLEED U BREATHERS

BLOCKING

Blockage and flow studies of a generalized test apparatus including various wing configurations in the Langley 7-Inch Mach 7 Pilot Tunnel

BLOWDOWN WIND TUNNELS

Adaptation and first cryogenic operation of T2 ONERA/CENT wind tunnel

Application of laser velocimetry to large industrial wind tunnels

Research on an induction driven cryogenic wind tunnel

Induction driven transonic wind tunnel: Operation at room temperature and cryogenic adaptation

BLOWERS

Study of the de-icing properties of the ASDE-3 rotodose

BLOWING

Effect of crossflows on the discharge coefficient of fuel cooling holes

Development of an advanced no-moving-parts high-lift airfoil

Wing-tip jets aerodynamic performance

Aerodynamic analysis of VTOL inlets and definition of a short, blowing-tip inlet

Experimental and analytical results of tangential blowing applied to a subsonic V/STOL inlet

BLOW FLAPS U EXTERNALLY BLOW FLAPS

BLUFF BODIES

Aerodynamic effects of shape, camber, pitch, and ground proximity on idealized ground-vehicle bodies
BOEING 757 AIRCRAFT

USAF Environmental Noise Data Handbook, volume 154
(AD-A116146) p0601 N82-33152

BOEING 757 AIRCRAFT

ARINC 429 digital data communications on the Boeing 757 and 767 commercial airliners
[AAIA 81-2267] p0049 A82-13485
Design evolution of the Boeing 757
p0126 A82-18322
2037 - Pratt & Whitney tests new turbine
p0126 A82-18347
Boeing 757 - Introducing the big-fan narrowbody
p0126 A82-18349
Boeing's bigger narrowbody
p0180 A82-21190
The development of high strength light-weight windshields for the new generation of Boeing 757 and 767 airliners
p0228 A82-24323
Boeing's new transports in a flight-test marathon
p0437 A82-37493
757 systems key to route flexibility
p0549 A82-42375
Gathering and analyzing data on the British Airways Boeing 757 aircraft
p0402 N82-25186

BOEING 767 AIRCRAFT

Air supply system bise for Boeing 767 airplane ---
Built-In-Test-Equipment
[AD-A892-7] p0011 A82-10895
ARINC 429 digital data communications on the Boeing 757 and 767 commercial airliners
[AAIA 81-2267] p0049 A82-13485
Boeing's bigger narrowbody
p0180 A82-21190
Boeing's new transports in a flight-test marathon
p0437 A82-37493
Compositing composites to the Boeing 767
p0461 A82-30224
Boeing's new 767 eased crew workload
p0497 A82-60348
Material and process developments on the Boeing 767
p0506 A82-60502
Airbus A 310 will compete with Boeing 767 for market
p0575 N82-32300

BOLLEW AIRCRAFT

NG BO-105 HELICOPTER

BOLTS

Bolted field repair of graphite/epoxy wing skin laminate
p0180 A82-20961
Improving composite bolted joint efficiency by laminate tailoring
p0180 A82-20962
D.C.9 windshield - effect of attachment retorque
p0228 A82-24324
Mechanically-fastened joints for advanced composites - Phenomenological considerations
p0228 A82-24324
Some observations on the corrosion of aircraft at the air force base in Bandirma, Turkey
p0211 N82-17353

BOMBER AIRCRAFT

NG B-4 AIRCRAFT
NG B-1 AIRCRAFT
NG B-52 AIRCRAFT
NG B-70 AIRCRAFT
NG F-100 AIRCRAFT

Simulation of modern radar installations in full-mission fighter and tactics simulators
[AD-A116146] p0160 A82-19272
A new look at the Tupolev Tu-26 'backfire'
[AD-A116146] p0160 A82-21191
The bomber that radar cannot see
p0274 A82-25074
Investigations regarding vortex formation at wings with bent leading edges
p0483 A82-38783
The testing of new technologies with the aid of the Alpha Jet aircraft
p0550 A82-43326
Forecasting corrosion damage and maintenance costs for large aircraft
p0212 N82-17357
Corrosion control measures for military aircraft: Present US requirements and future developments
p0212 N82-17358

SUBJECT INDEX

COrrosion prediction methods developed from direct experience with aerospace structure
p0212 N82-17358
Multi-mission V/STOL with vectored thrust engines
p0212 N82-17359
[PHM-9086] p0356 N82-22278
BOEING EQUIPMENT

Technology overview for advanced aircraft armament system program
(AD-A107680) p0201 N82-17155
Standardization study for advanced aircraft armament system program
(AD-A107681) p0201 N82-17156
Reduced performance and increased cost warrant reassessment of the multiple stores ejector rack
(AD-A112776) p0469 N82-27285
BOBES (ORDNANCE)

Bomb crater repair techniques for permanent airfields, Report 1: Series I tests
[AD-A108716] p0257 N82-10229
BOORD

NG ADHESIVE BONDING
NG METAL BONDING
NG METAL-REINFORCED MATTERIALS
NG EPOXY BONDING
NG EPOXY RESINS

BOEHMER AIRCRAFT

NG EPOXY RESINS
NG EPOXY BONDING
NG METAL-REINFORCED MATTERIALS
NG EPOXY BONDING
NG METAL BONDING
NG ADHESIVE BONDING

Radoe aerodynamic heating effects on boresight error
p0291 A82-26465
Full scale test facilities for radomes and antenna windows
p0281 A82-26467
Duplication of radose aerodynamic heating using the Central Receiver Test Facility solar furnace
p0281 A82-26468

BOMBER COMPONDES

NG BOE-EOXY COMPOUNDS
NG BOE-EOXY COMPOUNDS
NG BOE-EOXY COMPOUNDS
NG BOE-EOXY COMPOUNDS
NG BOE-EOXY COMPOUNDS

Flight service evaluation of advanced structures
p0291 A82-27402
Prediction of cyclic growth of cracks and debonds in aluminum sheets reinforced with boro/epoxy
p0288 A82-27151

BORS

NG ALPHA PARTICLES
NG LIGHT BARES
NG PHOTONS
NG BOUNDARIES
NG GAS-SOLID INTERFACES
NG JET BOUNDARIES
NG LIQUID-SOLID INTERFACES

BOUNDARY LAYER METHOD

Generation of boundary-conforming grids around wing-body configurations using transfinite interpolation
p0553 A82-44091

BOUNDARY LAYER CONTROL

NG BOUNDARY LAYER THRUST VECTOR CONTROL

Developments in boundary layer thrust vector control
[4144 81-2628] p0107 A82-16902
Comparison of experimental and analytical methods for contoured endwall stators [NASA-TN-82077]

Aerodynamics of advanced axial-flow turbomachinery (AD-B119911)

Comparision of experimental and analytic methods for contoured endwall stators [NASA-TN-82077]

Aerodynamic analysis of VIOL inlets and definition of a short, blowing-lip inlet [NASA-TN-82065]

B-147 vortex alleviation flight tests: Ground-based sensor measurements [AD-A113621]

A summary of V/STOL inlet analysis methods [NASA-TN-82255]

Boundary layer noise [AIAA-82-17202]

Boundary layer transition and separation on a compressor rotor airfoil [NASA-TN-82-0561]

Effect of wake of upstream stator blades on the rotor of an axial flow compressor [NASA-CP-2218]

AERODYNAMIC NOISE

BOUNDARY LAYER STABILITY

Stability of boundary layers with porous suction strips: Experiment and theory [NASA-PRE-82-0585]

Boundary layer transition and separation on a compressor rotor airfoil [PS-74-182-251]

Stability of boundary layers with porous suction strips: Experiment and theory [NASA-PRE-82-0586]

Boundary layer transition at supersonic flow velocities [NASA-PRE-82-0584]

Stability of boundary layers with porous suction strips: Experiment and theory [NASA-PRE-82-0587]

Stability of boundary layers with porous suction strips: Experiment and theory [NASA-PRE-82-0588]
BOUNDARY LAYERS

BOUNDARY LAYERS

NT COMPRRESSIBLE BOUNDARY LAYER
NT INCOMPRESSIBLE BOUNDARY LAYER
NT LAMINAR BOUNDARY LAYER
NT PLANAR BOUNDARY LAYER
NT THREE DIMENSIONAL BOUNDARY LAYER
NT TURBULENT BOUNDARY LAYER
NT TWO DIMENSIONAL BOUNDARY LAYER

AIRCRAFT excursions drag
[AGARD-AD-204] p0025 882-10020
AIRCRAFT wing trailing-edge noise
Allowing for the wall boundary layer in a stage of
an axial compressor
[PB-90067] p0319 882-21209

BOUNDARY LAYER PROBLEMS

Analysis of small-aspect-ratio lifting surfaces in
ground effect
p0378 882-32223
Approximate boundary condition procedure for the
two-dimensional numerical solution of vortex wakes
[AI/A PAPER 82-0951] p0437 882-37467
Numerical methods for solving boundary value
problems for noncavitating and cavitating flow
past wing profiles
p0483 882-38722

The use of analog computers in solutions of
inverse problems of heat conduction for the
identification of boundary conditions on the
surfaces of gas-turbine-engine parts on the
basis of temperature-measurement results
p0492 882-39667

The analysis of the thermal-mechanical stress
conditions in anisotropic rotating hot
components of /aircraft/ gas turbines --- German
thesis
p0543 882-41686

Nonlinear two-dimensional sail theory
[AD-A110450] p0405 882-25220
Hybrid state vector methods for structural dynamic
and aeroelastic boundary value problems
[NASA-CR-35911] p0547 882-31304
Numerical stability analysis of a compressor model
[AD-A116678] p0610 882-33396

BOB SHOCK WAVES

U SHOCK WAVES

BOX BRAKES

Durability evaluation of highly stressed wing box
structure
p0290 882-27163

BRAKES (FOR ARRESTING MOTION)

BT ABROADIC BRAKES
BT AERODYNAMIC BRAKES
BT AIRCRAFT BRAKES
BT LEADING EDGE SLAPS
BT SPLIT FLAPS
BT TRAILING-EDGE FLAPS
BT WHEEL BRAKES
BT WING FLAPS
Aerocastistic characteristics of nosoboy
parachute decelerators limited to a length of
three feet
[AI/A PAPER 81-1950] p0007 882-10425
Escape system decelerator technology
[AI/A PAPER 81-1913] p0063 882-13966

BRAKING

Dynamics of aircraft antiskid braking systems ---
conducted at the Langley aircraft landing loads
and traction facility
[NASA-TP-1959] p0254 882-18204
Tire tread temperatures during antiskid braking
and cornering on a dry runway

BRAQUING (MATHEMATICS)

The application of bifurcation theory to the study
of loss of control over combat aircraft
[ONERA, TP NO. 1981-100] p0129 882-18837
Cone-Braze ablative seal practical
p0341 882-31048
Selected ferrous brazed components for the
aerospace industry
p0582 882-46529

BREAKAWAY

U BOUNDARY LAYER SEPARATION

BRAKES (STRUCTURES)

The stability of portable bridges carried on
slings beneath helicopters
[AIL/1EA/KEP-156] p0319 882-21213

SUBJECT INDEX

BRISTOL-SIDDELEY BS 53 ENGINE
Maintenance problem associated with the operation
of the F402 /Pegasus/ engine in the AV-8A
[AI/A PAPER 81-2656] p0109 882-16915
A real time Pegasus propulsion system model for
VSTOL piloted simulation evaluation
[AI/A PAPER 81-2662] p0157 882-19221

BRITTLE MATERIALS

Bristole materials design, high temperature gas
turbine
[AD-A106670] p0191 882-16085

BROADBAND

Broader bandwidth for thin conformal antennas
p0154 882-19069

BROADCASTING

FM broadcast interference related to airborne LLS,
VHF and VHF communications
[SKCA-00-176] p0268 882-19419
Investigation of technical requirements
p0268 882-19420

BUBBLE TECHNIQUE

Visualization of flow separation and separated
flows with the aid of hydrogen bubbles
p0179 882-20803

BUCKLE/ I CIRCUIT

U T-2 AIRCRAFT

BUCKLING

MT ELASTIC BUCKLING
The behavior of composite thin-walled structures
in dynamic buckling under impact
p0513 882-40976

BUFFETING

Pressure measurements on twin vertical tails in
buffeting flow
[AIL-62-0640] p0337 882-30138
Some remarks on buffeting --- of wings, wind
aircraft
[AIL-62-0640] p0392 882-21216
Undelayed pressure measurements at stand and
buffeting
[DFVLR-EBIT-79-09] p0364 882-23198

BUILDING MATERIALS

U CONSTRUCTION MATERIALS

BUILDING STRUCTURES
U BUILDINGS

BUILDINGS

The employment of helicopters in Austria in
connection with large-scale fires in buildings
p0331 882-29585
STOL aircraft response to turbulence generated by
a tall upward building
p0433 882-35821
Repair and maintenance of buildings in civil
aviation --- Russian book
p0544 882-82059

BOOTS
A global atlas of GEOS-3 significant waveheight
data and comparison of the data with national
buoy data

BONcIERS
The effect of swirl burser aerodynamics on Nox
formation
p0326 882-28658

BORING
U CORROSION

BURING PROCESS
U CORROSION

BUFFALO EFFECTS

Effects of elastomeric additives on the mechanical
properties of epoxy resin and composite systems
p0113 882-17538
The preparation and characterization of mixtures
of polycyclopentadienes as solid ramjet fuels
[AD-A115075] p0483 882-42059

BUTTERFLY VALVES

NT DAMPERS (VALVES)

BIAS-RATIO

Analysis of the characteristics of a bypass
engine, with allowance for variable pressure
losses in the channels
p0282 882-26496

Individual bypass throttling in fighter engines
[AIL/1EA/KEP-1285] p0419 882-35100
Experimental performance evaluation of "ventilated
mixers" - A new mixer concept for high bypass
turbofan engines
[AIL/A PAPER 82-1136] p0493 882-37695

A-100
Subject Index

Recent advances in the performance of high bypass ratio fans...

The role and implementation of different nacelle/engine simulation concepts for wind-tunnel testing in research and development work on transport aircraft...

Aerodynamic aspects of a high bypass ratio engine installation on a fuselage afterbody...

A thrust reverser for a large duct fan engine --- for turbofan engines...

C-band X-band vs C-band aircraft radar - The relative effects of beamwidth and attenuation in severe store situations...

C-band spectral tracking for P/CW altimetry...

C-141 aircraft Development of the advanced composite ground spoiler for C-1 medium transport aircraft...

C-5 aircraft C-5A uninstalled taxi and off-load demonstrations...[AIAA Paper 81-2439] p0065 A82-13875

A computerized system for the application of fracture tracking data to aircraft management for the C-5A military aircraft transport...[AIAA Paper 81-2516] p0057 A82-13913

C-5A operational utility evaluation soil tests and analysis...[AD-A105555] p0133 A82-14083


C-130 aircraft Results of T56 engine performance monitoring trial in Hercules aircraft, February - July 1977...[ALT-TECH-ENG-TECH-NO-409] p0036 A82-29322

KC-135 aircraft KC-135 Avionics Modernization Hot Bench...[AIAA 81-2105] p0001 A82-10081

KC-135 avionics modernization hot bench - An evaluation of requirements and design for the future...[AIAA Paper 81-2114] p0057 A82-19244


C-140 aircraft External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing...[AIAA Paper 81-0809] p0050 A82-40895

C-141 aircraft Improvement program for the C-141 Navigation Selector Panel...[AD-A111469] p0008 A82-25248

Delta electrical load analyser C-141B JAC/CP aircraft...[AD-A111469] p0026 A82-25283

Human-factors evaluation of C-141 fuel savings...[AD-A110951] p0050 A82-20053

Simulation of the interaction between airborne platforms and aircraft rollers...[AD-A111469] p0058 A82-30304

C-160 aircraft Importance of a tactical cargo aircraft in emergency relief...[AIAA Paper 81-2499] p0043 A82-25499

C-130 aircraft Aircraft cabin air ozone contamination and compliance with regulations...[NASA-TH-84067] p0211 A82-21161

C-5A operational utility evaluation soil tests and analysis...[AD-A110954] p0053 A82-29322


C-5A operational utility evaluation soil tests and analysis...[AD-A105555] p0133 A82-14083


C-130 aircraft Results of T56 engine performance monitoring trial in Hercules aircraft, February - July 1977...[ALT-TECH-ENG-TECH-NO-409] p0036 A82-29322

KC-135 aircraft KC-135 Avionics Modernization Hot Bench...[AIAA 81-2105] p0001 A82-10081

KC-135 avionics modernization hot bench - An evaluation of requirements and design for the future...[AIAA Paper 81-2114] p0057 A82-19244


C-140 aircraft External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing...[AIAA Paper 81-0809] p0050 A82-40895

C-141 aircraft Improvement program for the C-141 Navigation Selector Panel...[AD-A111469] p0008 A82-25248

Delta electrical load analyser C-141B JAC/CP aircraft...[AD-A111469] p0026 A82-25283

Human-factors evaluation of C-141 fuel savings...[AD-A110951] p0050 A82-20053

Simulation of the interaction between airborne platforms and aircraft rollers...[AD-A111469] p0058 A82-30304

C-160 aircraft Importance of a tactical cargo aircraft in emergency relief...[AIAA Paper 81-2499] p0043 A82-25499

C-130 aircraft Aircraft cabin air ozone contamination and compliance with regulations...[NASA-TH-84067] p0211 A82-21161

C-5A operational utility evaluation soil tests and analysis...[AD-A110954] p0053 A82-29322

C-141 aircraft Tanker Avionics/Aircrew Complement Evaluation (TAACE). Phase 1: Simulation evaluation. Volume 1: Results...[AD-A110954] p0152 A82-26290


C-140 aircraft External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing...[AIAA Paper 81-0809] p0050 A82-40895

C-141 aircraft Improvement program for the C-141 Navigation Selector Panel...[AD-A111469] p0008 A82-25248

Delta electrical load analyser C-141B JAC/CP aircraft...[AD-A111469] p0026 A82-25283

Human-factors evaluation of C-141 fuel savings...[AD-A110951] p0050 A82-20053

Simulation of the interaction between airborne platforms and aircraft rollers...[AD-A111469] p0058 A82-30304

C-160 aircraft Importance of a tactical cargo aircraft in emergency relief...[AIAA Paper 81-2499] p0043 A82-25499

C-130 aircraft Aircraft cabin air ozone contamination and compliance with regulations...[NASA-TH-84067] p0211 A82-21161

C-5A operational utility evaluation soil tests and analysis...[AD-A110954] p0053 A82-29322

C-141 aircraft Tanker Avionics/Aircrew Complement Evaluation (TAACE). Phase 1: Simulation evaluation. Volume 1: Results...[AD-A110954] p0152 A82-26290


C-140 aircraft External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing...[AIAA Paper 81-0809] p0050 A82-40895

C-141 aircraft Improvement program for the C-141 Navigation Selector Panel...[AD-A111469] p0008 A82-25248

Delta electrical load analyser C-141B JAC/CP aircraft...[AD-A111469] p0026 A82-25283

Human-factors evaluation of C-141 fuel savings...[AD-A110951] p0050 A82-20053

Simulation of the interaction between airborne platforms and aircraft rollers...[AD-A111469] p0058 A82-30304

C-160 aircraft Importance of a tactical cargo aircraft in emergency relief...[AIAA Paper 81-2499] p0043 A82-25499

C-130 aircraft Aircraft cabin air ozone contamination and compliance with regulations...[NASA-TH-84067] p0211 A82-21161
Aerodynamic performance of slimmer wings with separated flows [AVIA-PAP81-2622] p0167 A82-16905

Computational treatment of transonic canard-wing interactions [AVIA-PAP85-0462] p0121 A82-17930

Experimeental structural testing on a composite aircraft canard and its applications [AVIA-PAP85-0462] p0164 A82-19760

Flow visualization using a computerized data acquisition system [AVIA-PAP85-0297] p0179 A82-20792

Wing-canard aerodynamics at transonic speeds - Fundamental considerations on minimum drag spenloa [AVIA-PAP85-0297] p0163 A82-22046

High angle-of-attack characteristics of three-surface fighter aircraft — canard-wing-horizontal tail configuration for greater stability and control [AVIA-PAP85-0462] p0104 A82-22074

Effect of downwash on the induced drag of canard-wing combinations [AVIA-PAP85-0462] p0298 A82-28518

Close-coupled canard-wing vortex interaction and Reynolds stress acquisition [AVIA-PAP85-1368] p0489 A82-39132

Calculations of transonic steady state aerelastic effects for a canard airplane [AVIA-PAP85-0462] p0504 A82-40882

Tail versus canard configuration - An aerodynamic comparison with regard to the suitability for future tactical combat aircraft [AVIA-PAP85-0462] p0506 A82-40901

Test results of chordwise and spanwise blowing for low-speed lift augmentation [AVIA-PAP85-0462] p0515 A82-40999

Optimization of canard configurations - An integrated approach and practical drag estimation method [AVIA-PAP85-0462] p0517 A82-41023

Wind-tunnel investigation of a full-scale canard-configured general aviation aircraft [AVIA-PAP85-0462] p0517 A82-41024

Wind tunnel measurements of longitudinal stability and control characteristics of primary and secondary wing configurations [AVIA-PAP85-0462] p0518 A82-41025

Minimum induced drag of canard configurations [AVIA-PAP85-0462] p0518 A82-41116

Numerical aircraft design using 2-D transonic analysis with optimization, volume 2: Part 2: Fighter design [AP-A110036] p0315 A82-21100


Low altitude test highlights, 1981 [AVIA-PAP85-04619] p0603 A82-33330

AEROFOILS

U S 2010 AIRCRAFT

A look at the Hoffman Triangular parachute - The first successful glidable parachute [AVIA-PAP85-0297] p0163 A82-22046

Final elements of a parachute system - Airframe design [AVIA-PAP85-0462] p0135 A82-32324

Method for refurbishing and processing parachutes [AVIA-PAP85-0462] p0329 A82-41782

Development of in-can melting process and equipment, 1979 and 1980 [AD-A105588] p0583 A82-47072

AMT's guide to fighter design computer program [AD-A105588] p0583 A82-47072

User's guide to transport design computer programs [AD-A105588] p0583 A82-47072
Development of materials and manufacturing technology over the next 20 years: Composite materials from [BB-00-34.1-0-0]...

CARBON FIBERS

Lear Fan - The plastic aeroplane arrives...p0126 88-18348

Carbon-fiber composites - A fiber composite material for highly stressed light-structure components...p0240 88-26805

Technical and economic comparison of carbon fiber tape and woven fabric applications...p0514 88-40993

Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage...p0527 88-28364

CARBON MONOXIDES

HC and CO emission abatement via selective fuel injection...p0426 88-35390

Exhaust emissions reduction for interstent combustion aircraft engines...p0610 88-33392

CARBON STEELS

Carburized high temperature steels...p0595 88-32647

CARBON TETRAFLUORIDE

Relations for the thermodynamic and transport properties of the testing environment of the Langley hypersonic CF4 tunnel...p0146 88-15359

CARBON-CARBON COMPOSITES

Correlation of wear with oxidation of carbon-carbon composites...p0285 88-27068

CARBONACEOUS ROCKS

HT LIGNITE

CARBONATES

HT POLYCARBONATES

CARRY MINGS

Aerodynamic characteristics of waveriders at subsonic flight speeds...p0165 88-19810

CARGO

HT AIR CARGO

CARGO AIRCRAFT

HT C-IA AIRCRAFT

HT C-5 AIRCRAFT

HT C-9 AIRCRAFT

HT C-130 AIRCRAFT

HT C-140 AIRCRAFT

HT C-141 AIRCRAFT

HT C-160 AIRCRAFT

HT F-27 AIRCRAFT

ACMA - Fact or fantasy --- Advanced Civilian/Military Aircraft...p0019 88-12048

KC-10 flight test program...p0076 88-16935

The cargo helicopter - A logistical vehicle...p0260 88-26477...Toward VLA air-cargo service...p0296 88-28277

The potential of large aircraft...p0376 88-31980

Very large aircraft with alternate fuels - L2...p0376 88-31986

The potential for long-range high-load aircraft with alternate fuels...p0376 88-31987

Turbojet cargo aircraft systems study...p0189 88-16070

CARRIER FREQUENCIES

B.F. calibrators for Doppler radars...p0150 88-18917

CARRIER ROCKETS

U LAUNCH VEHICLES

CARTESIAN COORDINATES

A new method for constructing two-dimensional orthogonal and non-orthogonal meshes...p0303 88-33630

CARTOGRAPHY

U MAPPING
CARTRIDGE ACTUATED DEVICES

CASCADe ACTUATED DEVICES
U ACTUATORS
U EXPLOSIVE DEVICES

CARTRIDGE ACTUATED DEVICES
1 ACTUATORS
U ACTUATORS
U EXPLOSIVE DEVICES

CARTRIDGE ACTUATED DEVICES
1 ACTUATORS
U ACTUATORS
U EXPLOSIVE DEVICES

CARTRIDGE ACTUATED DEVICES
1 ACTUATORS
U ACTUATORS
U EXPLOSIVE DEVICES

CARRIAGES

CARRIAGES

CARRIAGES

CARRIAGE CONTROL

Digital redesign of existing multiloop continuous control systems — with application to IP-16 aircraft flight controller

Cascade converter of dc voltage to ac voltage of higher frequency with voltage and frequency stabilization on devices — aircraft electric equipment

CASCADe FLOW

Wind tunnel tests on airfoils in tandem cascade

End losses in turbine cascades with porous cooling

On unsteady aerodynamic forces and moments of the circular cascading blades /Experiments of the outward-flow case/

Aeroelastic characteristics of a cascade of mistuned blades in subsonic and supersonic flows

Prediction of aerodynamically induced vibrations in turbine mixing blading

A high-frequency transonic small disturbance code for unsteady flows in a cascade

Mathematical modeling of unsteady separated flow past solid airfoil cascades

A comprehensive preliminary design optimization of axial gas turbine stages

A computational design method for transonic turbomachinery cascades

A mixed-flow cascade passage design procedure based on a power series expansion

An inviscid-viscous interaction treatment to predict the blade-to-blade performance of axial gas turbine cascades with leading edge normal shock waves

The calculation of the deviation angle in axial-flow compressor guide vanes

A new transonic turbine rotor blades - an experimental study using transient techniques

Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade

Numerical calculation of the flow in compressor and turbine cascades — German thesis

Theoretical investigations and experimental researches for higher subsone two-dimensional compressor cascade

Subsonic cascade wind tunnel tests using a compressor configuration of DCA blades

Stability and flutter analysis of turbine blades at low speed

Application of quasi-stationary aerodynamic force acting on cascade of oscillating airfoils in subsonice flow

Numerical experiments on unsteady flows through vibrating cascades

On the numerical analysis of stall flutter in turbine cascades

Control of vibration in aeroelastic cascade experiments

A method of characteristics solution for a finite oscillating supersonic cascade with thickness effects

Three-dimensional analysis of cascade flutter in parallel shear flow

The effect of aspect ratio on the aeroelastic forces induced by vibration of a cascade blade

Study of acoustic resonance of cascades — sound generated by guide vanes; wind tunnel investigations

Correlation for secondary flows and clearance effects

Effects of Reynolds number and turbulence level on axial cascade performance

Experimental investigation of turbine endwall heat transfer. Volume 1: Description of experimental hardware and test conditions

Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets

Experimental investigation of turbine endwall heat transfer. Volume 3: Data base system

Thrust reverser for a low-drag fan engine — for turbofan engines

Blade tip gap effects in turbomachines: A review

CASCADe HEAT TURBINES

Heat transfer measurements of a transonic nozzle guide vane

Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade

CASCADe (FLUID DYNAMICS)

CASting

Influence of casing treatment on the operating range of axial compressors

Effect of the rear stage casing treatment on the overall performance of a multistage axial-flow compressor

Casting

Precision casting for gas turbine engines

International aviation (selected articles)

CASTOR OIL

A history of aircraft piston engine lubricants

CATALYSTS

Development of catalytic systems for the conversion of syngas to jet fuel and diesel fuel and higher alcohols

Evaluation of hydrocracking catalysts for conversion of whole shale oil into high yields of jet fuels

Catalytic Activity

Defining and upgrading of syngas from coal and oil shale by advanced catalytic processes

Advanced Low-Emissions Catalytic-Combustor Program, phase 1 of aircraft gas turbine engines

Radiation/catalytic augmented combustion

CATAPULTS

Investigation of crossdeck pendant catapult slot interaction; proposed corrective measures

SUBJECT INDEX

A-104
CENTRIFUGAL COMPRESSORS

C C C B P U R E S T P C C D C B E R 1 7 5 C O M P U T E R
C C C B E R 1 7 0 S E R I E S C O M P U T E R S
P T C C D C B E R 1 7 5 C O M P U T E R
C C C B E R 1 7 5 C O M P U T E R

Design and implementation of a telecommunication interface for the THAL/TCV real-time experiment

[NASA-TH-81231] p0042 882-19475

CHALLENGES (ARCHITECTURE)
Evaluation of the acoustic measurement capability of the NASA Langley V/STOL wind tunnel open test section with acoustically absorbent ceiling and floor treatments

[NASA-CH-165796] p0030 882-10059

CHALLENGES (AERODYNAMICS)
Weather deterioration models applied to alternate airport criteria

[AD-A108077] p0309 882-20811

CELESTIAL BODIES
PT TITAN

CELESTIAL OBSERVATION U ASTROPHYSIOLOGY

CELESTIAL MATERIALS (MBI BIOLOGICAL)

U FOAMS

CENTRIFUGAL COMPRESSORS

CHALLENGES

Briefs of accidents, involving corporate/executive aircraft, U.S. general aviation, 1979

[PB82-138967] p0046 882-27245

Briefs of accidents involving missing and missing later-recovered aircraft, U.S. general aviation, 1979

[PB82-138959] p0046 882-27246

Briefs of accidents involving alcohol as a cause/factor, U.S. general aviation, 1979

[PB82-138962] p0045 882-27245

Briefs of fatal accidents involving weather as a cause/factor, U.S. general aviation, 1979

[PB82-138934] p0045 882-27246

Briefs of accidents involving computer air carriers and on-demand air taxi operations, U.S. general aviation, 1979

[PB82-138991] p0045 882-27255

Briefs of accidents involving aerial application operations, U.S. general aviation, 1979

[PB82-138993] p0045 882-27256

Briefs of accidents involving seaplane and/or seaplane operation, U.S. general aviation, 1979

[PB82-138975] p0046 882-27257

CAVITATION

U CAVITATION FLOW

CAVITATION FLOW

Cavitation inception in spool-valves

p0105 882-16428

Visualization of flow separation and separated flows with the aid of hydrogen bubbles

p0579 882-20803

Numerical methods for solving boundary value problems for noncavitating and cavitating flow past wing profiles

p0483 882-30722

Use of the cavitation tunnel at the Dutch Naval Experiment station (NVS), Wageningen for the determination of the acoustic source strength of propeller rotation

[TP-908-720] p0530 882-29116

CAVITIES

A multi-dimensional-crack-growth prediction methodology for flaws originating at fastener holes

p0327 880-20932

CCD

U CHARGE COUPLED DEVICES
CERTIFICATION

The certification of civil composite aircraft structure

Preliminary experiments on a centrifugal research compressor using a laser - 2 - focus velocimeter (OKEA, TP no. 1982-62)

Certification of ablation composite materials. Phase I: 1978 to 1979 - for aircraft engines

[BTIF-PW-W-81-025]

Reduction in centrifugal fans by the use of lambda/alpha coatings

[BSA-TT-723]

CHEMICAL PROTECTIVE COATINGS

U CEREBTS

U PROTECTIVE COATINGS

CHEMICALS

U CEREBTS

CERAMIC COATINGS

Novel metal-ceramic composite sealing coatings in aircraft engines

Gas turbine ceramic-coated tube concept with convection-cooled porous metal core

[NASA-TF-1942]

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components

[PB-90076]

High temperature composites. Status and future directions

[NASA-TB-82929]

CERAMICS

HT PYROCHEM (TRADEMARK)

New materials fly better and cheaper

Ceramic component development for limited-life propulsion engines

[AIAA PAPER 82-1050]

Demonstration of ceramic hot-section static components in a radial flow turbine

[ASME PAPER 82-07-184]

Ceramic components for automotive and heavy duty engine engines - CAFE and AGT 100

[ASME PAPER 82-07-253]

Ceramic turbine housings

[ASME PAPER 82-07-293]

Development of low density material for use in ceramic gas path seal applications

[NASA-CR-165669]

Britle materials design, high temperature gas turbine

[AD-A106670]

Chey-Braze adhesively heat attach to aircraft gas turbine compressor components

[AD-A111632]

High temperature composites. Status and future directions

[NASA-TH-82929]

Ceramic applications in turbine engines

[NASA-P-30336]

Ceramic gas turbine engine demonstration program

[AD-A117060]

CEREBTS

Novel metal-ceramic composite sealing coatings in aircraft engines

[ASME PAPER 82-07-293]

CERTIFICATION

The certification of digital systems

Preliminary experiments on a centrifugal research compressor using a laser - 2 - focus velocimeter (OKEA, TP no. 1982-62)

[BTIF-PW-W-81-025]

Advanced compressor components. Phase I: 1978 to 1979 - for aircraft engines

Application of damage tolerance technology to type certification

[SAE PAPER 81062]

Certification of civil composite aircraft structure

[SAE PAPER 81061]

SUBJECT INDEX

The impact and future direction of aircraft noise certification

737 graphite-epoxy horizontal stabilizer certification

[AIAB PAPER 82-0745]

Certification of an airborne Loran-C navigation system

Preliminary experiments on a centrifugal research compressor using a laser - 2 - focus velocimeter (OKEA, TP no. 1982-62)

[BTIF-PW-W-81-025]

Reduction in centrifugal fans by the use of lambda/alpha coatings

[BSA-TT-723]

CHEMICAL PROTECTIVE COATINGS

U CEREBTS

U PROTECTIVE COATINGS

CHEMICALS

U CEREBTS

CERAMIC COATINGS

Novel metal-ceramic composite sealing coatings in aircraft engines

Gas turbine ceramic-coated tube concept with convection-cooled porous metal core

[NASA-TF-1942]

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components

[PB-90076]

High temperature composites. Status and future directions

[NASA-TB-82929]
SUBJECT INDEX

CHEMICALS
- MT CARBON MONOXIDE
- MT HYDROGEN OXIDES
- MT POLYSULFIDES
- MT SILICON DIOXIDE

CHANCE-FOUGHT MILITARY AIRCRAFT
- U MILITARY AIRCRAFT

CHANDLER MOTION
- U POLAR VANDERBURG (GEOL)

CHANNEL FLOW
- Determination of losses in a channel with a sudden expansion behind a diffuser

CHANNEL NOISE
- Tangential sensitivity of SW receivers

CHANNELS (DATA TRANSMISSION)
- A polled contention multiplex system using MIL-STD-1553 protocol

CHARACTERIZATION
- Characterization of an experimental burner

CHARACTERISTIC EQUATIONS
- Characteristic equations for the numerical solution of partial differential equations

CHARACTERISTIC FUNCTIONS
- Characteristic functions of a linear system

CHARACTERISTIC METHOD
- Method of characteristics

CHARACTERISTIC PROPERTIES
- Chemical properties

CHEMICAL ANALYSIS
- MT GAS ANALYSIS
- MT OXIDATION
- MT QUALITATIVE ANALYSIS
- MT QUANTITATIVE ANALYSIS

CHEMICAL COMPOSITION
- Stabilization of new chemical chemicals

CHEMICAL CLEARING
- Chemical clearing methods

CHEMICAL ELEMENTS
- Mt ALKALI METALS
- Mt ALUMINUM
- Mt CARBON
- Mt CHROMIUM
- Mt COPPER
- Mt LIQUID HYDROGEN
- Mt NITROGEN
- Mt POTASSIUM
- Mt SODIUM
- Mt SILICON
- Mt TANTALUM
- Mt TITANIUM
- Mt TRITIUM

CHEMICAL EXTINGUISHERS
- Fire extinguishers

CHEMICAL FUELS
- MT AIRCRAFT FUELS
- MT AUTOMOBILE FUELS
- MT DIESEL FUELS
- MT GASOLINE
- MT HYDROCARBON FUELS
- MT HYDROGEN FUELS
- MT JET ENGINE FUELS
- MT JP-5 JET FUEL
- MT JP-8 JET FUEL
- MT LIQUID FUELS
- MT RP-1 ROCKET PROPULSANTS

CHEMICAL ENGINEERING
- Reaction kinetics

CHEMICAL MACHINING
- Electrochemical machining

CHEMICAL MILLING
- Chemical milling

CHEMICAL PROPERTIES
- Heat of combustion
- Heat of fusion

CHEMICALS
- MT Aeronautical applications of bonding

A-107
CLADDINGS

A surveillance airship for the New Zealand environment

Aerodynamic characteristics of the external USB powered lift system using side fences for enhanced performance of Coanda flow attachment

A multifrequency adaptive radar for detection and identification of objects - Results on preliminary experiments on aircraft against a sea-clutter background

A surface singularity method for rotors in hover

A test and demonstration report

An evaluation of the Bosemount ice detector for aircraft icing conditions

An operational evaluation of head up displays for civil air transport operations. NASA/FAA Phase 3 report

Automated low-cost weather observation system (ALMOS)

Aircraft measurements of icing in supercooled and water droplet/ice crystal clouds

Befining and upgrading of synfuels from coal and oil shales by advanced catalytic processes

Befining and upgrading of synfuels from coal and oil shales by advanced catalytic processes

Blade tip gap effects in turbomachines - A review

Blade tip cooling evaluation: High pressure turbine active clearance control in the CF6 jet engine

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade tip gap effects in turbomachines: A review

Blade ti...
COASTS
- United States Coast Pilot 9. Pacific and Arctic
- Coasts Alaska: Cape Spencer to Beaufort Sea
  [PB2-105562] p0254 882-18201

COATINGS
- MT ANODIZING
- MT METALLIZING

COATINGS
- MT ALUMINUM COATINGS
- MT ANTIRADAR COATINGS
- MT ANTIREFLECTION COATINGS
- MT CERAMIC COATINGS
- MT GLASS
- MT METAL COATINGS
- MT METALLIZING
- MT PAINTS
- MT PLASTIC COATINGS
- MT PROTECTIVE COATINGS
- MT SPATIAL COATINGS
- MT THERMAL CONTROL COATINGS

COAXIAL TRANSMISSION
U TRANSMISSION

COBALT
Where is cobalt irreplaceable

A status review of NASA's COSAM (Conservation Of
Strategic Aerospace Materials) program
[NASA-TR-82-8052] p0347 882-24326

COBALT ALLOTS

ST BONE 95
Torso stiffness element based on
cobalt-niobium magnets -- for a turn and bank
indicator
[NASA-TR-W-81-044] p0470 882-27292

COCKPIT SIMULATORS
Simulation of advanced cockpits
[p0158 882-19259

Data base generation for digital external view
systems
[DGII PAPER 81-101] p0159 882-19270

A simulator assessment of a wide field of view
cockpit display for presenting a FLIR sensor
image during low level navigation and ground
attack missions
[AIAA PAPER 82-0261] p0104 882-22079

Applying advanced technology to flight station
design
[p0504 882-40087

A general aviation simulator evaluation of a
rate-enhanced instrument landing system display

The role of simulation in the design process
[p0299 882-18154

Simulator study of a pictorial display for general
aviation instrument flight

COCKPITS
Have we overlooked the pilot's role in an
automated flight deck
[AIAA-81-2262] p0048 882-13461

The application of large screen CRT's, touch
panels, and voice to the flight stations of the
1990's
[AI AA 81-2263] p0048 882-13462

F/A-18 Hornet - One man operability
[AI AA 81-2266] p0048 882-13460

Application of a microprocessor controlled cockpit
display for enhanced pilot control of flight
test maneuvers
[AI AA PAPER 81-2510] p0057 882-13908

The influence of smart computers on the cockpit of
the future
[AI AA PAPER 81-2511] p0057 882-13908

Airborne color CRT displays
[p0069 882-14743

Flight crew management and cockpit performance
systems
[p0073 882-14823

F/A-18 weapon system development
[p0223 882-23774

Deficiencies and constraints that affect the
design of cockpit enclosures and transparencies
[p0236 882-24303

B.A.C. One-Eleven flight deck glazing product
improvement
[p0220 882-24325

Integration of energy management concepts into the
flight deck
[SIA PAPER 81-1066] p0231 882-24387

The future of helicopter flight control technology
[p0246 882-26021

Flight simulators
[p0336 882-29924

The computerized cockpit for the one-man crew
[p0434 882-36937

Analysis of in-trail following dynamics of
CFT-equipped aircraft -- Cockpit Displays of
Traffic Information
[AI AA PAPER 82-1330] p0488 882-39107

Boeing's new 767 ease crew workload
[p0497 882-40388

Conceptual design of the LHI integrated cockpit
[p0500 882-40527

Future helicopter cockpit design
[p0500 882-40529

Concept demonstration of automatic subsystem
parameter monitoring -- military helicopter
cockpit instrumentation
[p0500 882-40530

The evolution of display formats for advanced
fighters using multisite color CRT displays
[p0505 882-40888

NASA studies business aircraft avionics
[p0502 882-43659

The impact of new guidance and control systems on
military aircraft cockpit design
[AGARD-CP-312] p0901 882-13048

How the helicopter cockpit designer uses digital
avionics
[p0901 882-13049

Electronic flight deck displays for military
transport aircraft
[p0902 882-13050

Color CRT displays for the cockpit
[p0902 882-13051

Integration of controls and displays in U.S. Army
helicopter cockpits
[p0902 882-13053

F/A 18 Hornet crew station
[p0903 882-13064

Threat perception while viewing single intruder
conflicts on a cockpit display of traffic
information
[ASA PAPER 81-1341] p0190 882-16076

The multi mode matrix flat panel display:
Technology and applications
[p0251 882-18169

New developments in cockpit-human interfaces
[ASA-81-312] p0255 882-18215

Analytical study of cockpit information displays
[AD-8100524] p0256 882-18210

Transport aircraft cockpit standardization
[Federal Aviation Regulations part 25]
[AD-8100924] p0264 882-19207

Integration of controls and displays in U.S. Army
helicopter cockpits
[AD-8109594] p0306 882-20191

Enhanced piloting control through cockpit
facilities and A.C.T.
[p0347 882-22195

Helicopter Handling Qualities
[ASA-CP-2219] p0364 882-23080

State-of-the-art cockpit design for the HH-65A
helicopters
[p0366 882-23220

Synthesis of an integrated cockpit management
system
[p0366 882-23222

The role of voice technology in advanced
helicopter cockpits
[p0366 882-23223

Cockpit integration from a pilot's point of view
[p0366 882-23224

Helicopter simulation technology: An Ames
Research Center perspective
[p0366 882-23225

Advanced technology and fighter cockpit design:
Which drives which?
[p0471 882-27302

Electronic/electric technology benefits study ---
avionics
COCOES

Evaluation of the FAA/NITE weather data device
[AD-A114646] p0562 N82-30800

Separation monitoring with four types of
predictors on a cockpit display of traffic
information
[AD-A117486] p0564 N82-30860

Speech Command Auditory Display System (SCADS)
[AD-A115511] p0570 N82-31332

CODING

COBOL CODING

COLLISIONS

COLLISION AVOIDANCE DEVICES

COLLISIONS

COLLISION AVOIDANCE DEVICES

COLLAPSE

COLLAPSE

COLLECTORS

COLLECTORS

COLLECTORS

COLLECTORS

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR

COLOR
The relation oscillation in ramjet combustion

Acoustic control of dilution-air mixing in a gas turbine combustor

Coastal deep marine combustor combustion instabilities. Part 1: Parametric test data

CONSUMPTION WAVES
U FLARE PROPAGATION
U CORONATION CHAMBERS

CONFORT

Aircraft pitch attitude as a performance parameter

Quantification of helicopter vibration ride quality

The assurance of impulsive helicopter noise

[NASA-CR-169123] p0046 A82-37776

CONFORM AND CONTROL

Interoperability testing of decentralized control, communications and intelligence /C3I/ systems

[ARIA 81-2205] p0034 A82-10143

Computergraphics for aircraft control

[ARIA 81-2313] p0051 A82-13515

Sea-based remotely piloted vehicles. I - Issues and concepts

p0332 A82-29714

U.S. Army remotely piloted vehicle supporting technology program

p0949 A82-39739

Flying qualities requirements for roll CAS systems

p0496 A82-40287

Using voice control onboard combat aircraft

p0092 A82-13056

A redundancy concept for a digital CAS

p0251 A82-18170

CONFORMANCE GUIDANCE

A polled contention multiple system using MIL-STD-1553 protocol

[ARIA 81-2271] p0049 A82-13487

Design and flight test of a lateral-directional command augmentation system

[ARIA 81-2331] p0052 A82-13527

A translational velocity command system for VTOL

[ARIA-TR-80215] p0305 A82-20186

A model for sensor-interceptor trade-off analysis

p0450 A82-26271

CONFORMANCE GUIDANCE

U CONFORMANCE GUIDANCE

U CONFORMANCE GUIDANCE

COMMERCIAL AIRCRAFT

ACCIDENT PREVENTION - A regulators view

Estimate of human control over mid-air collisions

Development of a digital integrated automatic landing system /DILAS/ for steep approach and landing

Operational and performance aspects of fuel management in civil aircraft

The application of condition monitoring in commercial helicopter in-service maintenance

Airworthiness considerations in the design of commercial transport aircraft

Electronic flight instrument systems /EFIS/, the instrumentation of the 1980s

Damage tolerance and durability design of composite structures for commercial aircraft

The role of software in commercial ATM

Test methodology for evaluation of fireworthy aircraft seat cushions

Commercial transport developments for the 1980's

Technology advancements for energy efficient aircraft engines

Progress at Douglas on laminar flow control

Using voice control onboard combat aircraft

Aerodynamic research applications at Boeing

New technology for the next generation of commercial transports - Heal or imaginary

Fault isolation SIFE for increased productivity

The sporty game --- on wide body commercial airliner business history

It's too logical - It'll never work /Commercial applications of the JVA/

Helicopter cobra - An optimistic outlook

Exterior noise on the fuselage of light propeller driven aircraft in flight

Lightweight diesel engine designs for commuter type aircraft

Application of singular perturbation theory

In-service inspection methods for graphite-epoxy structures on commercial transport aircraft

Augmented microcomputer hardware and software topics, 1981: Proceedings of the 4th BOLI

MIL-STD Computer User's Group Conference

[ARIA-CP-2206] p0138 A82-14829

Natural laminar flow airfoil analysis and test studies

[ARIA-CR-150029] p0140 A82-15018

Symposium on commercial-aviation energy-conservation strategies

[DBHI-02806] p0188 A82-16057

Use of optimization to predict the effect of selected parameters on commuter aircraft performance

[NASA-CR-160349] p0201 A82-17151

Aircraft corrosion

[AGARD-CP-315] p0211 A82-17349

Naval versions of the Dauphin and the AS 15 TT weapon system

p0247 A82-18142

Impact of technology on aviation cost trends

[AD-A10894A] p0256 A82-18219

Bibliography of NASA published reports on general aviation, 1975 to 1981

[ARIA-TR-83037] p0260 A82-19132

FAA statistical handbook of aviation

[AD-A109289] p0263 A82-19198
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships (NASA-CS-165533)

Conception control test method for avionic components (AD-A108061)

Component research for future propulsion system (NASA-TN-82559)

Fatigue analysis of composite materials using the fail-safe concept (NASA-TN-76671)

Reliability model for planetary gear (NASA-TR-82559)

Commercial aircraft airframe fuel systems survey and analysis (DOT/FAA/CT-82/80)

Efficient part removal processes --- from molds (AD-A307438)

Light aircraft structural design in non-metals - Use of composite honeycomb for light aircraft (AD-A1082167)


Impact-initiated damage thresholds in composites (AD-A1082174)

Aircraft composite materials and structures (AD-A1082163)


C-H-46 and C-H-47 composite rotor blade lightning protection testing (AD-A1082170)

Preliminary design development AV-8B forward fuselage composite structure (AD-A1082171)

Application of advanced composite materials to helicopter airframe structures (AD-A1082168)

Statistical analysis methods for characterizing composite materials (AD-A1082169)

Effects of defects on tension composites undergoing an accelerated environmental spectrum (AD-A1082170)


Characterization of composite variations in a structural adhesive (AD-A1082172)

Counter control .ubes (AD-A1082173)

Processing and uses of carbon fibre reinforced plastics --- Book (AD-A1082174)

Utility of a probability-density-function curve and F-maps in composite-material inspection (AD-A1082175)
Development of the Triflex rotor head

A set of finite elements developed for the dynamic computation of composite helicopter blades (OIRNA, TP No. 1981-07)

The all composite Lear Fan 2100

Stress intensity factor measurements in composite sandwich structures

Experimental structural testing on a composite aircraft canard and its applications

Design of the composite spar-waist joint

Structural testing of composites with known defects

The use of composite rotor blades during fatigue testing

Fibrous composites in structural design — Book

Composite aircraft structures

Composite wing substructure technology on the AV-8B advanced aircraft

Preliminary design development AV-8B forward fuselage composite structure

Wing/ fuselage critical component development program

Development of a preloaded hybrid advanced composite wing pivot fairing

Design concepts for composite fuselage structure

Advanced composites integral structures meet the challenge of future aircraft systems

Continous filament advanced composite isogrid — A promising structural concept

A crashworthiness test for composite fuselage structure

Problems and options in advanced composite repair

A CAD approach to cost estimating composite aircraft

Mechanically-fastened joints for advanced composites - Phenomenological considerations and simple analyses

Sensitivity of bonded and bolted joints in composites to load/environmental spectrum variations — as fighter aircraft structures

Composite fasteners — A compatible joining technique for fibrous composites in structural design — aircraft construction materials

Durability evaluation of highly stressed wing box structure

Flight service evaluation of advanced structures

Damage tolerance and durability design of composite structures for commercial aircraft

Light weight adhesive joining of composite structures

The design, construction, and performance of composite fuselage components for the Boeing 234 helicopter

Composite bonds improve thermal integrity

A giant step toward composite helicopters

A laboratory mock-up ultrasonic inspection system for composites

Structural dynamics of shroudless, hollow, fan blades with composite in-lays

Composite containment systems for jet engines

A-118
A summary of jet-impingement studies at Aeronautical Engineering Laboratories.

Computational treatment of transonic canard-wing interactions.

A more accurate computational method for wing-body configurations.

Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis.

Computations of transonic flow over an oscillating airfoil with shock-induced separation.

Viscous flow - Resemblance of the theoretically leaner, pursuit of higher order accuracy.

Responses of oscillating wings in weak shear flow.

A contribution to the holograph method for shock-free transonic airflow sections.


Aerodynamic of a transport aircraft-type wing-fuselage assembly.

Three-dimensional calculation of the flow in a helicopter air intake.

Numerical solution of three-dimensional unsteady transonic flow over wings including inviscid/viscous interactions.

Real gas flows over complex geometries at moderate angles of attack.

 bluff bodies approach applied to flow past thin airfoils.

A perspective of computational aerodynamics from the viewpoint of airplane design applications.

Recent advances in lifting free vortex sheet theory to the estimation of vortex flow aerodynamics.

Isolated macule performance - Measurements and simulation.

A split coefficient/locally monotonic scheme for multishocked supersonic flow.

Steady and unsteady non-linear hybrid vortex method for lifting surfaces at large angles of attack.

Design of supercritical swept wings.


Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles.

Three-dimensional calculation of the flow in a rotor of an axial flow compressor.

Effect of wakes of upstream stator blades on the rotor of an axial flow compressor.

Unsteady response of rectangular wings in operation.

Uniform sheet flow.

Computational fluid dynamics - The coming revolution.

Supercritical flow past symmetrical airfoils.

Effect of wakes of upstream stator blades on the rotor of an axial flow compressor.

Unsteady response of rectangular wings in operation.

Computational fluid dynamics - The coming revolution.

Numerical solution of Space Shuttle Orbiter flow field.

Sonic flow past thin wings.

Aerodynamics - Retrospect and prospect /The 21st Lancaster Memorial Lecture/.

Supercritical flow past symmetrical airfoils.

Effect of wakes of upstream stator blades on the rotor of an axial flow compressor.

Unsteady response of rectangular wings in operation.

Uniform sheet flow.

Computational fluid dynamics - The coming revolution.
Computer-aided manufacturing

Primary-data devices --- Russian book
The application of small propellers to LAP propulsion
The use of linearized-aerodynamics and vortex-flow methods in aircraft design (invited paper)
A new Transonic Airfoil Design Method and its application to helicopter rotor airfoil design
Optimum structural design --- for helicopters
Engineering aspects of international collaboration on Tornado
CATIA - A computer-aided design and manufacturing

Configuration Development System/HATAIB Report
Integration of a code for aeroelastic design of Snbcritical and supercritical airfoils for given interactive-graphic flowpath plotting for turbine
Computer program for aerodynamic and bidding
High lift selected concepts
Hodeling and Analysis of Power Processing Systems
The automatic matrix force method and techniques
Characteristic and principal gains and phases and an algorithm, invariant relative to the initial parameterization in the design of surfaces by Coons' method for computer-aided

Configuration Development System for aircraft means of Coons' method for computer aided

The electronic terrain map * A new avionics Airborne associative processor /4SPBO/ for computer-generated displays
CATIA - A computer aided design and manufacturing

Improving the MLS through enhanced cockpit displays
A prototype interface unit for microprocessor

Structural tailoring of engine blades (ST4EBL)
Computational aerodynamics and design
Automated optimum design of wing structures.
Life and Utilization Criteria Identification In Design (LICID), volume 1

Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 1
Cost and benefits design optimization model for fault tolerant flight control systems
An effective algorithm for shock-free wing design
A method for designing inlet distortion screens

Integrated control design techniques
Numerical aircraft design using 3-D transonic analysis with optimization, volume 3. Part 2: User's guide to fighter design computer program

A computer program for variable-geometry single-stage axial compressor test data analysis
Parallel computation for developing nonlinear control procedures
Integrated control design techniques
A short takeoff performance computer program
Numerical aircraft design using 3-D transonic analysis with optimization, volume 3. Part 2: User's guide to fighter design computer program

A computer program for variable-geometry single-stage axial compressor test data analysis

Computer-aided manufacturing

The DRAPO system - Materials means and Logic functions
Computer aided coordinate measuring systems --- in engineering design of helicopter components
CATIA - A computer aided design and manufacturing

Computer DESIGNS

A prototype interface unit for microprocessor based Loncon-C receiver

Computer design

Bridging the gap from aircraft to space computers
Airborne associative processor /ASPBO/ --- for early warning radar surveillance, command, and control applications
The SIPT computer and its development --- Software Implemented Fault Tolerance for aircraft control

Computer graphics

Integration of computer graphics design with analytical models --- for aircraft design
Solution to the hidden-line problem
The electronic terrain map - A new avionics integrator
Computer graphics for aircraft control

An advanced programmable/reconfigurable color graphics display system for crew station
The Space Shuttle vehicle checkout involving flight avionics software

Controlling the software/hardware interface for the validation of avionics systems --- in flight control systems

The certification of digital systems

Digital avionics systems --- The BAF experience

The SIFT computer and its development --- Software Implemented Fault Tolerance for aircraft control

Navy performance modeling techniques

The need for, and development of, a simulation facility at the Naval Air Test Center

The design and implementation of a canned scenario function for the F-16 dynamic system simulator

Weather impact on low-altitude imaging infrared sensors in Europe -- An availability model

Digital simulation of aircraft electrical generating system by means of Spectre program

The application of programmable pocket calculators for computations during survey flights

Transonic three-dimension viscous-inviscid interaction for wing-body configuration analysis

Numerical computation of optimal atmospheric trajectories involving staged vehicles

'Intel Horse': An automatic calculation model for the prediction and control of fixed-wing aircraft noise. I -- General considerations, theoretical bases and model analysis

Utilization of hybrid computational equipment for the simulation of parachute system flight

KC-135 avionics modernization hot bench -- An evaluation of requirements and design for the future

CAN/CAN approach to improving industry productivity within moments

A Microwave Landing System simulation

Aircraft transparency bird impact analysis using the BAGMA computer program

The role of software in commercial ATE

The micro revolution comes to civil air transport

A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport

Comparison between computations and experimental data in unsteady three-dimensional transonic aerodynamics, including aerelastic applications

Bird impact analysis package for turbine engine fan blades

Subsonic aerodynamic and flutter characteristics of several wings calculated using the SOUSA 81.1 panel method

Fatigue life prediction of helicopter clutch link using Kamai life calculation methods

Optimization of compressor vane and bleed settings

An approach to software for high intensity applications --- in aircraft gas turbine engine control

Computer Monitored Inspection Program (MEAP), a key to increased aircraft and personnel productivity

Construction and testing of an Omega navigation system for the balloon-borne X-ray experiment --- German thesis

Interactive graphics design with CODEE

High Order Languages /HOL/ for flight control applications

Flight test results of the modal simulation controller for the U.S. 320 for in-flight simulation of the A310 Airbus

Conception of high Reynolds number internal/external flows

Integrated analysis of engine structures

Subsonic military aircraft engine intake: An integrated theoretical experiment design

Numerical analysis of the scramjet-inlet flow field by using two-dimensional Navier-Stokes equations

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

A generalized escape system simulation computer program: A user's manual

Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships

Software considerations in airborne systems and equipment certification

Prediction of sound radiation from different practical jet engine units

Function specifications for the A-7E Flight

Results of calculations

Investigation and evaluation of a computer program to simulate three-dimensional flight time tracks

Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test

A-7E software module guide

Transport aircraft cockpit standardization

A descriptive study of the application of analysis of variance and regression techniques in an error analysis program for test data obtained in an 18 foot transonic tunnel

Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques

A-126
Control devices

Control law design to meet constraints using SPECTRAC-synthesis package for active controls [NASA TP-83264] p0356 A82-22280

An analytical study of turbulence response, including horizontal tail loads, of a control configured jet transport with relaxed static stability p0655 A82-26313

Design, simulation and evaluation of advanced display concepts for the F-16 control configured vehicle p0563 A82-30059

Integrative application of active controls (IAAC) technology to an advanced subsonic transport project. Initial act configuration design study [NASA CR-159269] p0593 A82-32380

Control devices

Control equipment

Control panels

Control boards

Control circuits

Current perspectives on emergency spin-recovery systems p0549 A82-43264

Control simulation

An approach to robust nonlinear control design --- with illustration of J-55 turbojet engine simulation p0045 A82-13128

Avionics systems simulation for the Northrop F/A-18L aircraft [AIAA 81-2274] p0049 A82-13480

Modelling procedures for handling qualities evaluation of flexible aircraft p0061 A82-13968

Real-time simulation of helicopter ZP-1 approaches into major terminal areas using BH4V, MLS, and CDTI [AIAA PAPER 82-0260] p0118 A82-17068

The use of adaptive control for helicopter trajectories in search operations p0158 A82-19065

Modelling of target radar scattering with application to guidance simulation p0175 A82-20570

Propulsion system controls design and simulation [AIAA PAPER 82-0322] p0185 A82-22091

The simulation study on a redundant flight control system p0185 A82-22120

Evaluation of a multivariable control design on a variable cycle engine simulation p0638 A82-37682

Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack [AIAA PAPER 82-1295] p0466 A82-39062

Sensor stabilisation requirements of RPV's -- a simulation study p0694 A82-39741

The design of a HPF ground station simulator p0695 A82-39750

Statistical analysis of simulated simulation of real time trajectory optimization algorithms p0549 A82-63261

Use of DFVLK in-flight simulator HPS-320 Hansa for handling qualities investigations p0677 A82-45146

A general aviation simulator evaluation of a rate-enhanced instrument landing system display [NASA-TP-1960] p0133 A82-14085

Firespace techniques for active flutter suppression [NASA CR-16931] p0396 A82-24206

Control stability

The use of observers on relaxed static stability aircraft p0608 A82-14740

Flutter mode suppression using hyperstable feedback [AIAA PAPER 82-0368] p0120 A82-17906

Modular control of relaxed static stability aircraft [AIAA 82-1524] p0684 A82-38949

Characteristics and principal gains and phases and their use as multivariable control design tools --- generalizing Nyquist and root-locus diagram techniques p0629 A82-10050

Design of high integrity multivariable control systems p0630 A82-10055

In-flight investigation of the effects of pilot location and control system design on airplane flying qualities for approach and landing [NASA CR-163115] p0145 A82-15074

A control model for maneuvering flight for application to a computer-flight testing program p0249 A82-18153

Apparatus for damping operator induced oscillations of a controlled system -- flight control [NASA CR-PS-11041-1] p0259 A82-18493

Effect of sourcil and vertical-tail vortex on the performance of a 3-surface F-15 model at transonic Mach numbers --- Langley 16 foot transonic tunnel [NASA TP-2043] p0556 A82-32320

Control sticks

Simulator investigations of various side-stick controller/stability and control augmentation.
systems for helicopter terrain flight
[AD-A107847] p0109 AS2-16073
Ground calibration of a strain-gauged CT-4A aircraft [1979]
[AD-A107847] p0109 AS2-16073
CONTROL SURFACES
 NT SPECIAL RUBBERS
 NT AILERONS
 NT ELEVATORS (CONTROL SURFACES)
 NT ELEVONS
 NT EXTERMALLY BLOOM FLAPS
 NT FLAPS (CONTROL SURFACES)
 NT GUIDE VANS
 NT HORIZONTAL TAIL SURFACES
 NT JET FLAPS
 NT JET VANS
 NT LEADING EDGE FLAPS
 NT LEADING EDGE SLATS
 NT RUBBERS
 NT SPLIT FLAPS
 NT SPOILER SLOT AILERONS
 NT SPOILERS
 NT TABS (CONTROL SURFACES)
 NT TRAILING-EDGE FLAPS
 NT UPPER SURFACE BLOOM FLAPS
 NT WING FLAPS

Direct digital design method for reconfigurable multivariable control laws for the A-7D Digita c II aircraft
p0074 AS2-14828
Stress intensity factor measurements in composite sandwich structures
p0113 AS2-17535
Concerning the calculation of the aerodynamic characteristics of fluttered wings
p0127 AS2-18589
Wing/control surface flutter analysis using experimentally corrected aerodynamics
p0283 AS2-26569
Analysis of a multihinged aileron with allowance for shear strain
p0333 AS2-29934
Method for the measurement of elastic deformations of aircraft models in a wind tunnel
p0388 AS2-34162
The use of differential pressure feedback in an automatic flight control system
[AD-A107847] p0405 AS2-18981
Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods
p0203 AS2-26569
On the kernel function collocation method in steady subsonic flow for wing with control surfaces
p0517 AS2-41022

Force and moment, flow-visualization, and boundary-layer tests on a shuttle orbiter model at Mach 6 [NASA-TP-1955]
p0097 AS2-13106
Pressure distributions on three different cruciform aft-tail control surfaces of a wingless airplane at Mach 1.60, 2.36, and 3.70.
Volume I: Trapezoidal tail
[NASA-TR-80097] p0098 AS2-13110
A program to evaluate a control system based on feedback of aerodynamic pressure differentials
[NASA-CA-163466] p0191 AS2-16089
Influence of strain on coefficients of longitudinal stability
[RB-PE-122/S/POB/22] p0319 AS2-21215
Eigenspace techniques for active flutter suppression
[NASA-CA-16831] p0396 AS2-24206
Use of the Pseudo-inverse for design of a reconfigurable flight control system
[AD-A111172] p0409 AS2-25264
Electromechanical Actuation Development Program (EADP). Power control development
[AD-A111172] p0572 AS2-31694

CONTROL SYSTEMS
 C CONTROL

CONTROL THEORY
 Design considerations for the direct digital control of dry-tuned gyroscope
p0017 AS2-11933
Control of electromechanical actuator elements for flight vehicles --- Russian book
p0020 AS2-12170

Robust flight control - A design example
p0082 AS2-15845
An application of total synthesis to robust coupled design --- turbojet engine control
p0154 AS2-19061
Analysis and optimization of control systems in piloted flight vehicles --- Russian book
p0001 AS2-22398
The role of modern control theory in the design of controls for aircraft turbine engines
[AD-A107847] p0262 AS2-26526
Development of a control law for the alleviation of maneuver loads on an elastic aircraft
p0388 AS2-30414
A practical approach to the design of multivariable control strategies for gas turbines
[ASME PAPER 82-01-150] p0426 AS2-35374
Application of multivariable model following method to flight controller
[AD-A107847] p0888 AS2-39102
A modern approach to pilot/vehicle analysis and the real-Smith criteria
[AD-A107847] p0489 AS2-39125
Control of the operations of a 'flight computer' --- Russian on ground installations to aid air and space navigation
p0577 AS2-45213
Theory and applications of optimal control in aerospace systems
[AD-A1107264] p0038 AS2-11073
An introduction to stochastic optimal control theory
p0038 AS2-11076
Computational methods of robust controller design for aerodynamic flutter suppression
Fixed state controller design for aircraft
[AD-A104877] p0809 AS2-12081
Parallel computation for developing nonlinear control procedures
[AD-A107916] p0209 AS2-17227
The influence of sensor and actuator characteristics on overall helicopter AFCS design
p0251 AS2-18171
Digital command augmentation for lateral-directional aircraft dynamics
[AD-A110274] p0319 AS2-21214
The role of modern control theory in the design of controls for aircraft turbine engines
[AD-A110274] p0354 AS2-22262
Application of modal control to wing-flutter suppression
Tactical systems approach to interdiction of 2nd echelon moving targets using real time sensors
p0472 AS2-27306

Digital command augmentation for lateral-directional aircraft dynamics
[AD-A1107264] p0474 AS2-27321
Applications to aeronautics of the theory of transformations of nonlinear systems
[NASA-TR-80239] p0540 AS2-30013
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 1
[AD-A1155110] p0570 AS2-31331
Design of analytical failure detection using secondary observers
[NASA-TR-80284] p0590 AS2-32362
System optimization by periodic control
[AD-A117815] p0611 AS2-33402

CONTROL VALVES

Cavitation inception in spool valves
p0105 AS2-16428
An ejector suggested choking valve for the metering and control of inlet and bleed duct flows
p0136 AS2-24659
Flight tests of a G2 and DCI direct drive fly by wire flight control system
[AD-A117246] p0611 AS2-33401

CONTROLABILITIY

Flight test experience with high-alpha control system techniques on the F-14 airplane
[AD-A107847] p0057 AS2-13906
Comparison of low-speed handling qualities in ground-based static-flight simulator tests
[AD-A107847] p0059 AS2-13936
Modeling procedures for handling qualities evaluation of flexible aircraft
p0061 AS2-13968
In-flight deflection measurement of the HiHAT
earootically tailored wing
[AIAA PAPER 81-4060] p0063 A82-14301
Enhanced aircraft handling qualities by
lateral multi-dynamics mode decoupling
Pilot models for discrete maneuvers
[AIAA 82-1519] p0484 A82-38940
Simulation investigations of various side-stick
controller/stability and control augmentation
systems for helicopter terrain flight
[AIAA 82-1522] p0484 A82-38942
Handling qualities criteria for flight path
control of V/STOL aircraft
[AIAA PAPER 82-1292] p0486 A82-39081
In-flight investigation of large airplane flying
qualities for approach and landing
[AIAA PAPER 82-1296] p0486 A82-39083
Guidance for the use of equivalent systems with
HIL-F-7052 --- for aircraft flight control
systems
[AIAA PAPER 82-1355] p0489 A82-39124
Flying qualities requirements for roll CAS system
[AIAA 82-1356] p0496 A82-39287
Requirements and possible design choices for
improving the operation of aircraft in the
terminal control area
[AIAA 81-2087] p0544 A82-41881
Theoretical investigation of the influence of
spoilers on the handling qualities of an
aircraft with direct lift control
[BAA-AT-601] p0207 B82-10023
Limited evaluation of an F-14A airplane utilizing
an aileron-rear interconnect control system in the
landing configuration
[BAA-TH-6172] p0100 B82-11148
In-flight investigation of the effects of pilot
location and control system design on airplane
flying qualities for approach and landing
[BAA-CH-163115] p0145 B82-15074
Stiffness degradation of impact damaged structure
[BAA-TP-17168] p0203 B82-17168
A translational velocity command system for V/STOL
aircraft
[BAA-TH-6215] p0305 B82-20106
A review of recent AGARD Symposium on the role of
maneuverability of combat aircraft
[BAA-TH-6216] p0346 B82-22108
Helicopter Handling Qualities
[BAA-CH-2210] p0364 B82-23208
V/STOL and V/STOL handling qualities specifications,
as overview of the current status
[BAA-TP-23209] p0364 B82-23209
A helicopter handling-qualities study of the
effects of engine response characteristics,
height-control dynamics, and excess power on
nap-of-the-earth operations
[BAA-TH-23214] p0365 B82-23214
Unified results of several analytical and
experimental studies of helicopter handling
qualities in visual terrain flight
[BAA-TP-23215] p0365 B82-23215
An assessment of various side-stack
controller/stability and control augmentation
systems for night nap-of-earth flight using
piloted simulation
[BAA-TH-23216] p0365 B82-23216
Prediction of aircraft handling qualities using
analytical models of the human pilot
[BAA-TH-24208] p0396 B82-24208
Notes on lateral-directional pilot induced
oscillations
[AD-A113999] p0474 B82-27322
Evaluations of helicopter instrument-flight
handling qualities
[AD-A110064] p0524 B82-28285
Analytical and simulator study of advanced transport
[BAA-CP-19572] p0526 B82-28298
A discussion of the flying qualities requirements of
a basic training aircraft
[BAA-CP-19572] p0536 B82-29318
Effects of higher order control systems on
aircraft approach and landing lateral
handling qualities
[BAA-CP-19572] p0563 B82-30848
Investigation of acoustic interactions in jet
Performance assessment of an advanced reheated
turbofan engine
-- Convergent-divergent nozzle concepts for a
reheated turbofan
Advanced airfoil cooling in
rocket engines
Advanced turbine study airfoil cooling in
rocket turbines
Geometric坐标系
Conjugate Boundary Conditions

COOLING SYSTEMS
Design challenges of high performance aircraft POD
ECCS cooling systems -- Electron-
Optical/Counterelectrode
[AMSE Paper 81-ENAS-6]
p0001 A2--10894

Flight test method for the determination of
reciprocating engine cooling requirements
[AMSE Paper 81-2446]
p0555 A2--13878

Cost of ownership advantages with a shared oil
system
p0230 A2--24378

Analysis of the temperature field of a
baffle-cooled gas-turbine-engine blade under
conjugated boundary conditions
p0295 A2--28015

Investigation of heat transfer in the vicinity of
the leading and trailing edges of a cooled
nozzle blade of a low-swirling gas turbine
p0295 A2--28018

Two-phase transpiration cooling
[AMSE Paper 81-27-09]
p0823 A2--35333

Measurements of heat transfer coefficients on gas
turbine components. I - Description, analysis
and experimental verification of a technique for
use in hostile environments
p0826 A2--35367

A vapour cycle cabin cooling system for the Sea
King HH.50 helicopter
p0088 A2--12069

Advanced airfoil cooling in
rocket turbines
p0369 A2--23249

COORDINATE TRANSFORMATIONS
Coordinate transformation in FLRS -- algorithms
and error analysis of Position Location and
Reporting System
p0124 A2--18158

Transformation relations for singularity avoidance
in three-dimensional trajectory optimization
p0378 A2--32137

Generation of three-dimensional boundary-fitted
curvilinear coordinate systems for wing/wing-tip
geometries using the elliptic solver method
p0381 A2--33318

COORDINATES
MT CARTESIAN COORDINATES
MT GEODETIC COORDINATES
MT LAGRANGE COORDINATES

COORDINATION
FRA/FCC coordination procedures for FM broadcast
stations
p0260 A2--19423

COPILOTS
MT AIRCRAFT PILOTS

CORES
MT HONEYCOMB CORES

CORRIDOR
New method for three-dimensional hollow
diabatic model and centrifugal stress
analysis of air cooled turbine blade model
[AMSE Paper 81-27-09]
p0537 A2--11067

CORIOLIS EFFECT
The influence of Coriolis forces on gyroscopic
motion of spinning blades
[AMSE Paper 82-08]
p0426 A2--35384

CORNER FLOW
Dilution jet behavior in the turn section of a
reverse flow combustor
[AMSE Paper 82-0192]
p0167 A2--20291

Experimental study of turbulence in blade end wall
corner region
[AMSE-CR-169283]
p0572 A2--31639

Acoustic flow corner flow and flap flow
[AMSE-CR-166396]
p0574 A2--32081

CORINA DISCHARGES
MT ELECTRIC CORONA

CORONAS
MT ELECTRIC CORONA

CORRECTION
Correcting for turbulence effects on average
velocity measurements made using five hole
spherical pitot tube probes
[AD-A112573]
p0470 A2--27290

COORDINATION
MT CORRELATION COEFFICIENTS
MT CORRELATION DETECTION
MT DATA CORRELATION
MT SIGNAL ANALYSIS

Hard limited approaches to correlation velocity
sensing
p0022 A2--12636

Opportunities for wind-tunnel/flight correlation
with new Boeing airplanes
p0804 A2--25206
Corrosion and Prevention of Corrosion in Boyal Air

Detection and prevention of corrosion in Boyal Air

Corrosion prevention methods developed from direct observations of aircraft corrosion

Corrosion control measures for military aircraft: Present UK requirements and future developments

Forecasting corrosion damage and maintenance costs for present UK requirements and future developments

Corrosion prevention methods developed from direct experience with aerospace structures

Corrosion prevention measures used in the construction of an aircraft airframe: The cases of 2014 and 2214 alloys

Recent developments in materials and processes for the protection of gas turbine blades - A platinum aluminide diffusion coating

Design and maintenance against corrosion of aircraft structures

A protective additive for jet fuels

The protection of gas turbine blades - A platinum aluminide diffusion coating

Attachment on superalloys by chemical and electroplating processes

Recent developments in materials and processes for the protection of gas turbine blades - A platinum aluminide diffusion coating

Recent developments in materials and processes for the protection of gas turbine blades - A platinum aluminide diffusion coating

Corrosion inhibiting engine oils

Corrosion control test method for avionic components

Corrosion control test method for avionic components

Aircraft corrosion

Corrosion in naval aircraft electronic systems

Corrosion protection schemes for aircraft structures: Some examples for the corrosion behaviour of Al alloys

Corrosion tests with MIL-H-83282 and MIL-H-6086 aircraft hydraulic fluids

Life enhancement of Naval systems through advanced materials

Corrosion Fatigue

Corrosion Fatigue conferences

Materials aspects of aircraft EMC design

Materials aspects of aircraft EMC design

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft

Costs of noise nuisance from aircraft
The development of cryogenic wind tunnels and their application to maneuvering aircraft technology

Recent sidewall boundary-layer investigations with suction in the Langley 0.3-meter Transonic Cryogenic Tunnel

A progress report on the European Transonic Wind Tunnel Project

Technical properties of a fiberglass prepreg system at cryogenic and other temperatures

The cryogenic wind tunnel for high Reynolds number testing

Status of the National Transonic Facility

Adaptation and first cryogenic operation of T2 Onera/Cez wind tunnel

Research on an induction driven cryogenic wind tunnel

Induction driven transonic wind tunnel T2: Operation at room temperature and cryogenic adaptation

Cryogenic Technology, part 1 --- conference proceedings: cryogenic wind tunnel design and instrumentation

Cryogenic Technology, part 2 --- conference proceedings: cryogenic wind tunnel design and instrumentation

Aerodynamics project. Significance and difficulties in the experimental and numerical simulation of complex flow processes with high Reynolds number as part of aircraft projects --- wind tunnel utilization

The development of cryogenic wind tunnels and their application to maneuvering aircraft technology

Status of the National Transonic Facility

Wind tunnel capability related to test sections, cryogenic, and computer-wind tunnel integration

Flow visualization in the Langley 0.3-meter Transonic Cryogenic Tunnel and preliminary plans for the National Transonic Facility

Seeing through flows in Langley's 0.3-meter Transonic Cryogenic Tunnel

Laser Doppler velocimetry application in the Langley 0.3-meter Transonic Cryogenic Tunnel

Velocity and flow angle measurements in the Langley 0.3-meter transonic cryogenic tunnel using a laser transit anemometer

Cryogenic wind tunnels: A selected, annotated bibliography

Cryogenics

Cryogenic turbine testing

Investigation of the application of a cryogenic blending process to produce antisticking diesel fuels

Performance of the ABDC Mark I laser was Environmental Chamber without oil diffusion pumping

Cryptography

Implementing aircraft identification schemes by public key cryptosystems
CUTTING
CT METAL CUTTING
CT FLAMING
Tubing and cable cutting tool
[HASA-CASE-LAB-12706-1] p0308 M02-20545

CW RADAR
CT CONTINUOUS WAVE RADAR
CYCLES
CT THERMOHYDRAULIC CYCLES
System optimization by periodic control
[AD-A117615] p0611 M02-33402

CYCLIC COMPOUNDS
The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels
[AD-A115075] p0560 M02-30414

CYCLIC LOADS
Fatigue substantiation of non-linear structures
p0013 M02-11224
Study of the load-carrying capacity of aircraft gas-turbine engine impellers under low-cycle loading at normal and high temperatures
p0011 M02-15482
A crack-closure model for predicting fatigue crack growth under aircraft spectrum loading
p0168 M02-20509
Process monitor helps make jet engines reliable
p0182 M02-21997
The Agusta's solution of AHS's hypothetical fatigue life problem
p0220 M02-24701
The challenge of standardizing fatigue testing methodologies
p0238 M02-24703
A simple crack closure model for prediction of fatigue crack growth rates under variable-amplitude loading
p0260 M02-26630
An analogy method for crack initiation life prediction
p0377 M02-45192
Effects of cyclic loading on projectile impact damage
p0202 M02-17167
Rotor model for the verification of computational methods
[ISS-275] p0214 M02-17630
Loading cycles and material data for the layout of a wind turbine of special hub concept
[ISS-273] p0215 M02-17643
Yawing of wind turbines with blade cyclic-pitch variation
[DEB-023639] p0461 M02-26022
Prediction of fatigue crack growth rates under variable loading using a simple crack closure model
[IEEE-NP-81023-0] p0529 M02-28685

CYCLING
CT CYCLES
CYLINDRICAL AFTERBODIES
CT AFTERBODIES
U CYLINDRICAL BODIES
U CYLINDRICAL SHELLS
Modification of 02-258/259 Tactical Air Navigation (PACAN) antenna group
[AD-A111680] p0449 M02-26264

CYLINDRICAL BODIES
Shape optimization of fiber reinforced composites
[AIAl 82-0719] p0339 M02-30169
Development and validation of preliminary analytical models for aircraft interior noise prediction
p0444 M02-30877
Analytical prediction of the interior noise for cylindrical models of aircraft fuselages for prescribed exterior noise fields. Phase 2: Models for sidewall trim, stiffened structures and cabin acoustics with floor partition
[NASA-CS-185609] p0350 M02-22952
Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure
[AD-A116396] p0573 M02-31710
CALCULATION
CT CYLINDRICAL SHELLS
Calculation of the stability of crosswise-reinforced cylindrical shells
p0120 M02-18621

CALCULATION
CT CYLINDRICAL BODIES
Subject Index

New estimation method for flutter or divergence boundary from random responses at subsritical speeds

[Ad-A110652] p0060 82-29079

Experimental and analytical studies of advanced air cushion landing systems

[NASA-CR-3476] p0067 82-12065

Development and trial of a rotary balance for the 3 a-low speed wind tunnels in the Federal Republic of Germany

[AD-A111226] p0395 82-24198

Conditions of generation and methods of damping the inlet vortex of a turbojet engine

[NASA-TF-76768] p0305 82-20182

Comparison of analytical and wind-tunnel results for flutter and gust response of a transport using with active control

[NASA-TR-2010] p0460 82-26703

A research program to reduce interior noise in general aviation airplanes. Influence of depressurization and damping material on the noise reduction characteristics of flat and curved stiffened panels

[NASA-CR-160935] p0462 82-27088

Rotocraft blade mode damping identification from random components using a recursive maximum likelihood algorithm

[NASA-CR-3600] p0607 82-33373

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

Dry friction damping mechanisms in engine blades

[NASA PAPER 82-07-162] p0426 82-35163

Study of noise reduction characteristics of composite fiber-reinforced panels, anterior panel configurations, and the application of the tuned damper concept

[NASA-CR-160745] p0322 82-21999

Development of experimentally compatible subsysytem methods for the analysis of aircraft structures

[AD-A111226] p0395 82-24198

The vibratory behavior of a rotating propeller shaft, Part 4: Vibration tests of a rotating propeller shaft in a rubber stern tube bearing

[JWEC-507220-88-1-Pt-2] p0398 82-24514

Dampness

U Moisture Content

Dampage

U Hazards

Data Turbofan Engines

U Turbofan Engines

Dassault Aircraft

AT RATION AIRCRAFT

Data Acquisition

A microprocessor-based data acquisition system for stall/spin research

[AIAA 81-2177] p0062 82-10126

FAA developing new collision avoidance, data acquisition and transmission systems

[Ad-A111165] p0351 82-22227

The development and use of a computer-interactive data acquisition and display system in a flight environment

[AIAA PAPER 81-2371] p0600 82-13946

Development of a simple, self-contained flight test data acquisition system

[Ad-A111226] p0395 82-24198

Data systems organization - a change for the better

--- Flight test data acquisition

[Ad-A1110612] p0461 82-25175

Advanced trend analysis/EDS data program

[AD-A113511] p0524 82-28206

Reduction and analysis of mode C altitude data collected at high altitudes over the continental United States

[Ad-A114555] p0532 82-29276

Data acquisition system for NASA Langley Research Center Impact Dynamics Research Facility

[NASA-TR-84510] p0561 82-30525

Reliability, availability, maintainability data tracking plan improved GARDENIA

[Ad-A117933] p0608 82-33378

Advanced medium scale real-time system --- for Army helicopter tests

[FASTEST 82-29079]

ATLAS/test data provision for the Tornado KTS - a challenging task

[FASTEST 82-29079]

Test facility and data handling system for the development of axial compressors

[AD-A111226] p0423 82-35322

Acquisition of F-100/JF high pressure compressor entrance profiles

[AD-A111226] p0427 82-35402

A single-frequency multitransmitter telemetry technique

[AD-A111226] p0427 82-35402

The detection of low level wind shear, I

[AD-A111226] p0434 82-36463

Economic analysis for data base management

[Ad-A111226] p0545 82-42208

APFFC standard airspeed calibration procedures

[AD-A108430] p0808 82-12074

An acquisition and analysis system for dynamic tests of airfoils

[Ad-A111226] p0905 82-13082

NASA Dryden Flight Loads Research Facility

[NASA-TN-81368] p0165 82-15079

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurements updated

[AD-A106271] p0192 82-16095

A versatile data acquisition system for a low speed wind tunnel

[AD-A106269] p0192 82-16097

Development of a simple, self-contained flight test data acquisition system

[NASA-CR-168438] p0213 82-17478

Test site instrumentation study, Volume 2: Crash 1 and crash 2 raw data

[8802-111832] p0258 82-18233

Review of rotocraft accidents 1977-1979

[NASA-TR-115601] p0351 82-22227

Development of a simple, self-contained flight test data acquisition system

[NASA-CR-168912] p0369 82-22345

V/STOL tilt rotor research aircraft. Volume 1: General information, revision C

[NASA-CR-166347] p0395 82-24194

V/STOL tilt rotor research aircraft. Volume 2: Ship 1 instrumentation

[NASA-CR-166348] p0395 82-24195

V/STOL tilt rotor research aircraft. Volume 3: Ship 2 instrumentation

[NASA-CR-166349] p0395 82-24196

V/STOL tilt rotor research aircraft. Volume 4: CFE technical data

[NASA-CR-166350] p0395 82-24197

On-line experiments in acquiring and exploiting AIDS data for ATC purposes

[AD-A111165] p0412 82-25506

Source assessment system

[Ad-A111223] p0461 82-25613

Design of a data acquisition and reduction system for satellite testing

[Ad-A110612] p0461 82-25670

Advanced trend analysis/EDS data program

[AD-A113511] p0524 82-28206

Reduction and analysis of mode C altitude data collected at high altitudes over the continental United States

[Ad-A114555] p0532 82-29276

Data acquisition system for NASA Langley Research Center Impact Dynamics Research Facility

[NASA-TR-84510] p0561 82-30525

Reliability, availability, maintainability data tracking plan improved GARDENIA

[Ad-A117933] p0608 82-33378

Data Adaptive Evaluators/Monitor

U Data Processing

U Data Reduction

U Data Transmission

Data Analysis

U Data Processing

U Data Reduction

Data Base Management Systems

Opto-electronic push-broom scanners

A-145
Investigators of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Teledyne Model 222 [NASA-CE-166362] p0535 N82-29315

Correlation of Preston-tube data with laminar skin friction (Log No. J12984) [NASA-79-04827] p0539 N82-29556

DATA BASES

Economic analysis for data base management p004 n82-39747
Electronic Warfare Avionics Integration Support Facility support processor [AD-A111641] p0408 N82-25249
Source assessment system [AD-A111223] p0412 N82-25613

DATA BASES

Aircraft alerting systems standardization study [AIAA 81-2242] p0408 N82-13468
Data base generation for digital external view systems [DIGITAL PAPERS 81-101] p0159 N82-19270
Analysis of system problems using aviation safety reporting system data p0219 N82-23312
Airborne data analysis/monitor system p0138 N82-14830
ADAMS executive and operating system p0138 N82-14831
Aeroscience Information Data Subsystem (AIDS): A ground-based component of air navigation services systems p0201 N82-17150
Collection and evaluation of propeller aircraft noise certification data [DFVL-81-20] p0270 N82-19958
Experimental investigation of turbine engine heat transfer. Volume 1: Description of experimental hardware and test conditions [AD-A110332] p0317 N82-21199
Experimental investigation of turbine engine heat transfer. Volume 3: Data base systems [AD-A110334] p0317 N82-21201
The Slit-Generation Model system. Volume 5: Spaces subsystem [AD-A110590] p0407 N82-26226
Analysis and preparation of a digital terrain data base for flight simulator use [AD-A115547] p0559 N82-30315
Study of the frequency assignment congestion in the ultra high frequency air traffic control air/guard communication band p0606 N82-33358

DATA BDDIES

U CHANNELS (DATA TRANSMISSION)

DATA COMPRESSION

U DATA COMPRESSION

Automatic digital gain ranging --- for flight test telemetry data [AIAA PAPER 81-2370] p0060 N82-13947
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS) [AD-A055410] p0132 N82-14072

DATA CONVERSION ROUTINES

MT SUBROUTINES

MT Inverse techniques for active flutter suppression [NASA-CR-168931] p0396 N82-24206

DATA CONVERTERS

MT ANALOG TO DIGITAL CONVERTERS

DATA CORRELATION

MT SIGNAL ANALYSIS

A recursive terrain height correlation system using multiple model estimation techniques [AIAA 82-1515] p0484 n82-38937
Vortex flow correlation --- water tunnel tests on thin slender wings [AD-1108725] p0307 N82-20668
Wind-tunnel/flight-drag correlation p0003 N82-25199
Wind-tunnel/flight correlation program on XB-70-1 p0004 N82-25201
Problem in correlation caused by propulsion systems p0004 N82-25202
F-15 wind-tunnel/flight correlations p0004 N82-25203
F-16F program overview and wind tunnel/flight correlation p0004 N82-25207
Investigation of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Textron Model 222 [NASA-CE-166362] p0535 N82-29315

DEDICATED TIME DIVISION MULTIPLE ACCESS (DTDMA) - A distributed signaling technique for advanced tactical communications p0067 N82-14719
PLSS engineering development testing - Early results --- Position Location Reporting System with data communication network for community users in tactical environment p0124 N82-18157
Enhanced noise immunity and error control in a fully integrated JILDE/GPS receiver --- Joint Tactical Information Distribution System p0125 N82-18171
Modernizing the Egyptian A.T.C. system p0125 N82-18273
Microwave communications to remotely piloted vehicles p0150 N82-18911
Laser communications via an atmospheric link p0175 N82-20615
Relay-enhanced data links in an interference environment p0176 N82-20684
Discrete Address Beacon System (DABS)/NADIS p220 N82-23322
MIL-STD 1553B - Aircraft environmental susceptibility effects p0229 N82-24357
Radiating elements for hemispherically scanned arrays --- onboard aircraft for data links to satellites p0379 N82-12992
An optical data link for airborne scanning system p0391 N82-34737
Application of an optical data link in the airborne scanning system p0391 N82-39275
U.S. Army remotely piloted vehicle supporting technology program p0494 N82-39739
A pilot's view on possible uses of AIDS airborne collision avoidance systems p0494 N82-39739
Design of a microprocessor-controlled linkage for simulator applications [AD-A115621] p0564 N82-30954

DATA MANAGEMENT

Two at a time - Flight test plans for the new Boeing airliners [AIAA PAPER 81-2370] p0059 N82-13941
Algorithms for an adaptive dynamic window in electronic map systems p0071 N82-14769
The Boeing Flight Test Data System 1980 [AIAA 81-2311] p0071 N82-14769
Instrumentation remote 'man' ground station p0179 N82-20769

PCMS - A commercial flight management computer system [AIAA 82-1515] p0404 N82-38938

DATA PROCESSING

MT DATA CORRELATION

MT DATA REDUCTION

MT DATA RETRIEVAL

MT DATA SMOOTHING

MT DATA STORAGE

MT DISTRIBUTED PROCESSING

MT MULTIPLYING (MULTIPROCESSORS)

MT OPTICAL DATA PROCESSING

MT PARALLEL PROCESSING (MULTIPROCESSORS)

MT SCENE ANALYSIS

MT SIGNAL ANALYSIS

MT SIGNAL PROCESSING

Digital avionics display processor [AIAA 81-2241] p051 N82-13513
Time-referencing of data in an asynchronous environment --- for fighter aircraft avionics [AIAA 82-2141] p0502 N82-13513
Recent improvements at the Naval Air Test Center for increased test system flexibility
OEICXHG
DELIFEEI
DEICIBS
DELTA BIHGS
DEICIBS
DELTA DABT AIBCBAFT
DEICIHG SYSIEHS
hi BEAPONS DELIVBBI
0 DEICEBS
DELTA WING VEHICL
Formation of triangular-element stiffness matrix
using sliding interpolation
Increasing the lift/drag ratio of a flat delta wing
Using high conical flow theory for the determination of the pressure distribution on the wave rider and its agreement with experimental results for supersonic flow
Aerodynamic characteristics of wavevectors at subsonic flight speeds
Alleviation of the subsonic pitch-up of delta wings
(CAIPIA PAPER 82-0129)
Crossflow shock on the suction side of a flat delta wing with supersonic leading edges
Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9
[CAIAA PAPER 82-0686]
On the vortex flow over delta and double-delta wings
[CAIAA PAPER 82-0949]
Chordwise and compressibility corrections for arbitrary planform slender wings
Leading edge separation at delta wings with curved leading edges in subsonic flow
Measurements and visualization of skin friction on the leeside of delta wings in supersonic flow
Sweep and deflection angles of the leading edge vortex of a delta wing by the laser-Doppler procedure
Dynamic load measurements with delta wings undergoing self-induced roll-oscillations
[LWAIMA PAPER 82-1320]
Lateral aerodynamics of delta wings with leading edge separation
[CAIAA PAPER 82-1386]
Forces and moments on double-delta wings
[CAIAA PAPER 82-0686]
Upper Vortex Flap - a versatile surface for highly swept wings
Analytical study of vortex flaps on highly swept delta wings
Spanwise distribution of vortex drag and leading-edge suction in subsonic flow
Eulerian effects in leading-edge vortex flap aerodynamics
Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices
(Data report)
[CAIAA-CR-16506]
Experimental study of delta wing leading-edge devices for flow reduction at high lift --- conducted in Langley 7- by 10-foot high-speed tunnel
Finite difference computations of the delta wing
Field over a delta wing
[FLUC-79-140]
Pressure distributions on some delta wings at M = 4 --- wind tunnel tests
[CAIAA-T8-90006]

A-150

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 ---
--- conducted in the Langley Transonic Dynamics Tunnel
[CAIAA-T8-93297]
Dynamic selection of transcomunications equipment - A new approach to the equivalent cost concept
[CAIAA T8-9545]
Energy environment study
[CAIAA-CR-166455]
Density (mass/volume)
[ISTA-PB-88-35307]
Density distribution
Flow field studies using holographic interferometry at Langley
[CAIAA-CR-167024]
Four-pad tilting pad bearing design and application for multidisc axial compressors
(AIAA PAPER 81-LUB-12) p0126 A82-18429
Design criteria for a wide range of rotor speeds
AIAA PAPER 81-LUB-12 p0126 A82-18429
Airborne measurements with a sensitive high resolution windward-sky radiometer
AIAA PAPER 80-109A p0195 A82-18504
A study of potentially low cost millimeter-wave radioaet sensors
AIAA PAPER 81-109A p0151 A82-18940
Boundary layer transition and separation on a compressor rotor airfoil
AIAA PAPER 81-109A p0151 A82-18942
YF-16 design concept and philosophy
AIAA PAPER 81-109A p0168 A82-20299
Airframe/airfoil compatibility - A constant challenge for aircraft designers
AIAA PAPER 81-109A p0221 A82-23444
Design considerations of DC-Link aircraft generation systems
AIAA PAPER 81-109A p0229 A82-24377
Design technology for improved performance retention in turboprop engines
AIAA PAPER 81-109A p0231 A82-24932
Airworthiness considerations in the design of commercial transport aircraft
AIAA PAPER 81-109A p0232 A82-24936
Designing for continued airworthiness - General aviation
AIAA PAPER 81-109A p0232 A82-24937
Aerospace technology for improved performance retention in turboprop engines
AIAA PAPER 81-109A p0247 A82-24919
Sonic fatigue testing of an advanced composite material
AIAA PAPER 81-109A p0250 A82-26399
US Navy begins slow shuffle towards V/STOL
AIAA PAPER 81-109A p0256 A82-26379
NASA research related to sailplane airfoils
AIAA PAPER 81-109A p0296 A82-28311
Design considerations of a computer-aided design system
AIAA PAPER 81-109A p0330 A82-29417
Design considerations and experiences in the use of composite material for an aeroelastic research wing
AIAA PAPER 81-109A p0339 A82-30146
Structural modification to achieve antiresonance in helicopters
AIAA PAPER 81-109A p0379 A82-30249
Small turboprop engine augmentor design methodology
AIAA PAPER 81-109A p0417 A82-35044
A comprehensive method for preliminary design optimization of axial gas turbine stages
AIAA PAPER 82-1264 p0419 A82-35091
On the influence of the number of stages on the efficiency of axial-flow turbines
AIAA PAPER 82-07-43 p0621 A82-35301
Improved vane-island diffusers at high swirl
AIAA PAPER 82-07-68 p0623 A82-35318
Design and investigations of a three dimensionally twisted diffuser for centrifugal compressors
AIAA PAPER 82-07-102 p0624 A82-35339
A computational design method for transonic turbomachinery cascades
AIAA PAPER 82-07-117 p0625 A82-35348
Performance analysis of the test results on a two-stage transonic fan
AIAA PAPER 82-07-123 p0625 A82-35353
Helicopter design synthesis
AIAA PAPER 82-07-123 p0640 A82-37772
General purpose research rotor
AIAA PAPER 81-05 R p0641 A82-37777
A design criterion for highly augmented fly-by-wire aircraft
AIAA PAPER 82-1550 p0685 A82-38869
Avoiding the pitfalls in automatic landing control system design
AIAA PAPER 82-1550 p0686 A82-39013
Development of the advanced composite ground spoiler for C-1 media transport aircraft
AIAA PAPER 82-03949 p0695 A82-39045
Analytical design and validation of digital flight control system structure
AIAA PAPER 82-1626 p0697 A82-39043
CDS-the designer's media, the analyst's model --> Configuration Development System for aircraft
AIAA PAPER 82-03949 p0714 A82-39091
Repair/discard concepts in design
AIAA PAPER 82-03949 p0745 A82-42178
Design and analysis of advanced composite structures
AIAA PAPER 82-03949 p0747 A82-42670
Applied flight mechanics in the design and in flight tests
AIAA PAPER 82-03949 p0750 A82-43327
Process and procedural approaches in the aerodynamic design of the Alpha Jet aircraft
AIAA PAPER 82-03949 p0755 A82-44328
New approaches to fighter design
AIAA PAPER 82-03949 p0756 A82-44329
Design study report for General Aviation Loran-C receiver
AIAA PAPER 82-03949 p0787 A82-12062
Establishment of an experimental technique to provide accurate measurement of the installed drag of close coupled civil nacelle/airframe configurations, using a full span model with turbine powered engine simulators
AIAA PAPER 82-03949 p0796 A82-13089
Helicopter landing gear design and test criteria investigation
AIAA PAPER 82-03949 p0814 A82-15035
Pre-design study for a modern four-bladed rotor for the Rotor System Research Aircraft (5984) -- integrating the TAC-60 main rotor
AIAA PAPER 82-16154 p0817 A82-16043
Study of controlled diffusion stator blading. I. Aerodynamic and mechanical design report
AIAA PAPER 82-16550 p0819 A82-16081
Brittle materials design, high temperature gas turbine
AIAA PAPER 82-16670 p0819 A82-16085
Deviation/turning angle correlations
AIAA PAPER 82-16670 p0820 A82-17193
Single stage transonic compressor and equivalent plane cascade
AIAA PAPER 82-16670 p0820 A82-17196
Results of calculations
AIAA PAPER 82-16670 p0820 A82-17198
Design philosophy of the Hughes model 600 helicopter
AIAA PAPER 82-18140 p0824 A82-19215
A design study of the Marshall- --- light transport twin-engined aircraft
AIAA PAPER 82-18140 p0825 A82-19215
Composite variable-area radial turbine technology program
AIAA PAPER 82-165408 p0826 A82-19221
A linear decomposition method for large optimization problems. Blueprint for development
AIAA PAPER 82-22245 p0826 A82-22245
Advanced Low-Emissions Catalytic-Combustor Program, phase I --- aircraft gas turbine engines
AIAA PAPER 82-159656 p0826 A82-22265
Synthesis of an integrated cockpit management system
AIAA PAPER 82-16670 p0836 A82-22222
Maintenance training simulator design and acquisition: ISD-derived training equipment design
AIAA PAPER 82-16670 p0837 A82-22221
On the design and test of a low noise propeller
AIAA PAPER 82-165936 p0862 A82-27089
The determination of gust loads on nonlinear aircraft using a power spectral density approach
AIAA PAPER 82-165936 p0856 A82-28303
Design basis for a new transonic wind tunnel model
AIAA PAPER 82-165936 p0857 A82-28311
Advanced casting: Today and tomorrow
AIAA PAPER 82-165936 p0858 A82-28406
Problems related to the integration of fault tolerant aircraft electronic systems
AIAA PAPER 82-165926 p0859 A82-29022
Design and implementation of USAF avionics integration support facilities
AIAA PAPER 82-165926 p0858 A82-30307
Functional design to support C.II/dabs flight experiments
AIAA PAPER 82-165947 p0859 A82-31126
DESIGN OF EXPERIMENTS

Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, Volume I
(AD-A115510) p0570 882-31331

DESIGN OF EXPERIMENTS 0 EXPERIMENTAL DESIGN

DESIGN TO COST

Productivity and safety --- reducing transport aircraft operating costs and increasing safety
p0111 862-17284

Advanced composites integral structures meet the challenge of future aircraft systems
p0288 862-27133

Combat survivability in the Advanced Technology Engine Study/ [AIAA PAPER 82-1287]
p0419 882-35101

The promise of laminated metals in aircraft design
p0506 882-49093

Design and experience with a low-cost digital fly-by-wire system in the SAAB JAS3 Yagen A/C
p0507 882-49095

Optimizing aerospace structures for manufacturing cost
p0516 882-41014

Design to life cycle cost capability of the PEICE models
p0556 882-44995

Task analytic techniques: Application to the design of a flight simulator instructor/operator console
[AD-A106724] p0257 882-18227

DESPERSION U SPIN REDUCTION

DESTRUCTIVE TESTS

Experimental structural testing on a composite aircraft Canadair and its applications
[AIAA PAPER 82-0409] p0121 882-17930

DETECTION

DT AIRCRAFT DETECTION

DT CORRELATION DETECTION

DT BAND PASS

DT REMOTE SENSING

DT SIGNAL DETECTION

DT TARGET RECOGNITION

DT ULTRASONIC FLAT DETECTION

Sensor failure detection system --- for the F100 turbofan engine
[NASA-CR-165515] p0100 882-13145

Test and evaluation of UV fiber optics for application for aircraft fire detector systems
[AD-A106129] p0195 882-16850

NASA research programs responding to workshop recommendations
p0311 882-21146

The effect of isospectral variability on the accuracy of high frequency position location
[AD-A107425] p0650 882-26274

A result in the theory of spiral search
[AD-A112481] p0466 882-27262

Response of cloud microphysical instruments to aircraft icing conditions
[AD-A112137] p0469 882-27284

Utilization of KAAPS-94 side-looking airborne radar systems in search and rescue
[AD-A114944] p0051 882-30434

DETERMINATION

R&D-3 structures --- inspection program for aircraft maintenance
p0224 882-24011

BB 211 powerplant deterioration - Review of current situation and lessons learned
[SAR PAPER 811053] p0231 882-24393

DETERMINATION U MEASUREMENT

DEBRIS SYSTEMS U CYCLOGRAPHIC EQUIPMENT

DIAGRAMS

DT REQUEST DIAGRAM

DT S-W DIAGRAMS

DIAMOND WINGS

U LOW ASPECT RATIO WINGS

U SWEEP WINGS

DIEC ELECTRONS

A study of potentially low cost millimetre-wave radiometric sensors
Radioactive measurements at 80 GHz
p0151 882-18942

DIELECTRICAL MATERIALS U DIELECTRICS

DIELECTRIC MATERIALS 0 RUBBER MATERIALS

Leaky wave antenna using an inverted strip dielectric waveguide --- for aircraft application
p0163 882-19552

GTD analysis of airborne antennas radiating in the presence of lossy dielectric layers

Silicon liquid crystal light valve for flight simulation applications
[AD-A110928] p0413 882-26005

DIESELS 0 DETERMINER

DIESEL FUELS

Lightweight diesel engine designs for consumer type aircraft

Advanced general aviation comparative engine/airframe integration study

USAF bioenvironmental noise data handbook. Volume 1
[AD-A111447] p0601 882-33154

DIESEL FUELS 0 LIQUID FUELS

Development of catalytic systems for the conversion of syngas to jet fuel and diesel fuel and higher alcohols
[DE82-000067] p0037 882-12255

Investigation of the application of a cryogenic blending process to produce antimisting diesel fuels
[AD-A110917] p0411 882-25399

Mobility fuels for the Navy
[AD-A112511] p0459 882-26485

Development of Army high-energy fuel diesel/turbine-powered surface equipment, phase 2
[AD-A111942] p0459 882-26487

DIFFERENTIAL ALGEBRA

DIFFERENTIAL ALGEBRA 0 ALGEBRAIC ANALYSIS

DIFFERENTIAL ALGEBRA U ANALOG COMPUTERS

DIFFERENTIAL EQUATIONS

DT ELLIPTIC DIFFERENTIAL EQUATIONS

DT FALKNER-SKAN EQUATION

DT GAUSS EQUATION

DT PARTIAL DIFFERENTIAL EQUATIONS

DT VOLTICITY EQUATION

A generalized Bill's method for the stability analysis of parametrically excited dynamic systems
p0274 882-25923

Implementable differential equations for nonlinear filtering --- radar tracking
[NLR-SP-81037 U] p0600 882-33120

DIFFERENTIAL GEOMETRY

DIFFERENTIAL GEOMETRY 0 TENSOR ANALYZES

DIFFERENTIAL OPERATORS

U DIFFERENTIAL EQUATIONS

DIFFERENTIAL PRESSURE

The use of differential pressure feedback in an automatic flight control system
[AIAA 82-1596] p0465 882-38891

A program to evaluate a control system based on feedback of aerodynamic pressure differentials

DIFFRACTION

DT WAVE DIFFRACTION

Elevation plane analysis of os-aircraft antennas
[AD-A112372] p0490 882-26554

The AES/F-18 diffraction HUD
[AD-A116262] p0608 882-33862

DIFFRACTION PATHS

Geodesic paths of an ellipsoid-mounted antenna
[AD-A116453] p0596 882-32573

DIFFRACTION PATTERNS

Diffraction by a finite strip
p0362 882-33605

GTD terrain reflection model with application to its glide slope
p0303 882-20166

DIFFUSORS

Optimal subsonic diffuser wall designs for arbitrary entry conditions
[AIAA PAPER 82-0132] p0115 882-17800
Determination of losses in a channel with a sudden expansion behind a diffuser  p0282 A82-26492

Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser  p0378 A82-33230

Analysis of two-dimensional internal flows using a primitive-variable relaxation Navier-Stokes procedure  p0346 A82-29899

Improved vane-inlet diffusers at high swirl  p0233 A82-35318

Design and investigations of a three dimensionally twisted diffuser for centrifugal compressors  p0242 A82-35339

Application and evaluation of a performance prediction method for straight rectangular diffuser  p0425 A82-35352

DIFFUSION

Study of controlled diffusion stator blading. 1. Aerodynamic and mechanical design report  p0190 A82-16081

Survey on diffusion factors and profile losses  p0204 A82-17186

Evaluation of profile loss predictions based on diffusion factors  p0206 A82-17200

DIFFUSION BONDING

DIFFUSION WELDING

DIFFUSION EFFECT

DIFFUSION ELECTRODES

Unsolved problems of nickel cadmium batteries  p0016 A82-11725

DIFFUSION MICAHILS

Widely-spaced co-axial jet, diffusion-flame combustor - Isothermal flow calculations using the two-equation turbulence model  p0115 A82-17791

NOx formation in flat, laminar, opposed jet methane diffusion flames  p0326 A82-29660

Chemistry of combustion of fuel-water mixtures  p0050 A82-12178

DIFFUSION WELDING

Diffusion bonding in superplastic forming/diffusion bonding  p0222 A82-23754

Metal honeycomb to porous wireform substrate diffusion bond evaluation  p0259 A82-18616

Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures  p0268 A82-19358

SPF/DB titanium concepts for structural efficiency foil NC  p0302 A82-20154

SPF/DB titanium LPC porous panel concept  p0302 A82-20155

Laminar flow control SPF/DB feasibility demonstration  p0322 A82-21532

DIPLOMA COMPOUNDS

BY POLYMER/FLUOROCARBON BLENE

DIGITAL COMMAND SYSTEMS

An advanced helicopter engine control system  p0258 A82-35292

Design and flight testing of direct side-force control laws  p0484 A82-38941

Active flutter suppression using optical output feedback digital controllers  p0592 A82-32275

DIGITAL COMMUNICATIONS

DIGITAL COMPUTERS

Simulation of advanced cockpits  p0158 A82-19259

Properties of the new flight and tactics simulators  p0158 A82-19265

Aircraft digital input controlled hydraulic actuation and control system  p0004 A82-10225

DIGITAL DATA

Digital data...
Development and evaluation of automatic landing control laws for light wing loading STOL aircraft

[NASA-CS-166160] p0026 N82-10043

DIRECT POWER GENERATORS

DIRECT FUEL CELLS
Phoenix airport solar photovoltaic concentrator project
p0577 A82-49490

DIRECTION FINDERS (RADIO)
U RADIO DIRECTION FINDERS

DIRECTIONAL ANTENNAS
MT DIPOLE ANTENNAS
MT BORN ANTENNAS
MT LOOP ANTENNAS
MT PARABOLIC ANTENNAS
MT RADAR ANTENNAS
MT SLOT ANTENNAS
MT STEERABLE ANTENNAS

Study of the effects of maneuver compensation on beam pointing accuracy
p0072 A82-14760

DIRECTIONAL CONTROL
MT THROTTLE VECTOR CONTROL
D Denial and flight test of a lateral-directional command augmentation system
[AIAA 61-2331] p0052 A82-13527
Results of NASA/FAA ground and flight simulation experiments concerning helicopter 3DE airworthiness criteria
p0366 N82-32219
Pilot opinions of sampling effects in lateral directional control
p0563 N82-30849

DIRECTIONAL SOLIDIFICATION (CRYSTALS)
"In situ" composites for jet propulsion and stationary gas turbine applications
p0062 A82-15924
Directional solidification: Project B2 --- of gas turbine rotor blade alloys
[PB-R-90888] p0356 N82-22279

DIRECTIONAL STABILITY
MT IONOSCOPE STABILITY
Interpretation and construction of a dynamic similarity model of the A 310 wings
[MM-FS-17/2/OEP/42] p0255 N82-18212

DIRECTORS
U AIRSHIPS
MT DISASTERS
Importance of a tactical cargo aircraft in emergency relief
p0243 A82-25499

DISCHARGE COEFFICIENT
MT DISCHARGE BEACON SYSTEM
Experimental study on discharge and loss coefficients of combustor swirlers
p0390 A82-34644
Effect of crossflows on the discharge coefficient of film cooling holes
[ASM PAPER 82-07-167] p0286 A82-35731
An experimental study of flow rate and thrust characteristics of a four-nozzle ejector with flow twist
p0581 A82-06140

DISCRETE ADDRESS BEACON SYSTEM
Discrete address beacon, navigation and landing system
p0010 A82-10650
Performance evaluation of target report extractor in the monopulse ATCRBS -- Air Traffic Control Radar Beacons System
p0071 A82-14776
A multimicroprocessor system for ATCRBS monopulse data processing
p0071 A82-14777
Discrete Address Beacon System /DABS/
p0220 A82-23322
Joint US/SSSR node 5 compatibility test program, volume 1
[PB-R-126616] p0314 N82-21173
Joint US/SSSR node 5 compatibility test program, volume 2
[PB-R-126624] p0314 N82-21174
Comparison between the surveillance performances of the Air Traffic Control Radar Beacon System node of the Mode S and the Automated Radar Terminal System
[AD-A1117733] p0950 N82-26273
Surveillance simulation testing of terminal and en route mode S sensors
[AD-A112250] p0466 N82-27265

Body S system accuracy
[AD-A112269] p0467 N82-27266
Cost analysis of the discrete Address Beacon System for the low-performance general aviation aircraft community
[AD-A112297] p0523 N82-28274

DISCRETE FUNCTIONS
Concerning the calculation of the aerodynamic characteristics of mechanism wings
p0127 A82-18589

DISCERNMENT
MT TACTILE DISCERNMENT
DISEASES
MT EYE DISEASES
DISES (SHAPES)
MT ACTUATOR DISSES
MT ROTATING DISSES
Hot isostatically pressed manufacture of high strength REEL 76 disk and seal shapes
p0580 N82-26439

DISLOCATIONS (MATERIALS)
MT EDGE DISLOCATIONS
DISTRIBUTION PRECIPITATION HARDENING
U PRECIPITATION HARDENING
DISPERSIONS
MT AERODYNAMICS
MT EMULSIONS
MT FOG
MT SMOKE
The dispersion of drop sizes in gas turbine fuel nozzle sprays
p019 A82-12107

DISPLACEMENT
Large displacements and stability analysis of nonlinear propeller structures
[NASA-TR-82850] p0572 N82-31707
Displacement measurement Optical sensors for displacement measurement
[AIAA PAPER 81-2450] p0063 A82-14381
In-flight deflection measurement of the HMBI aerodynamically tailored wing
[AIAA PAPER 81-2450] p0063 A82-14381

DISPLAY DEVICES
MT ANEMOMETERS
MT APPROACH INDICATORS
MT FLOW DIRECTION INDICATORS
MT SHORT DISTANCE INDICATORS
MT WIND DIRECTION INDICATORS
MT POSITIONS INDICATORS
MT RADARSCOPES
MT RADIO DIRECTION FINDERS
MT SPEED INDICATORS
MT WIND VANKES
Improving the MLS through enhanced cockpit displays
p0009 A82-10649
Digital avionics: What a pilot expects to see
[AIAA 81-2312] p0051 A82-13513
Aircraft separation assurance avionics
[AIAA 81-2303] p0050 A82-13508
Aircraft alerting systems standardization study
[AIAA 81-2242] p0049 A82-13468
The application of large screen CRT's, touch panels, and voice to the flight stations of the 1990's
[AIAA 81-2263] p0049 A82-13468
Electronic flight deck displays for transport aircraft
[AIAA 81-2264] p0049 A82-13463
The electronic terrain map - A new avionics integrator
[AIAA 81-2299] p0049 A82-13498
The interface of multifunction controls and displays to tomorrow's avionics
[AIAA 81-2299] p0049 A82-13499
Aircraft integration and development of the future military aircraft
[AIAA 81-2302] p0050 A82-13507
An integrated control panel utilizing a programmable microprocessor-multichip electronic liquid crystal display
[AIAA 81-2363] p0050 A82-13508
Digital avionics display processor
[AIAA 81-2311] p0051 A82-13513
Advanced display systems for crew stations of tactical aircraft
[AIAA 81-2312] p0051 A82-13514

A-156
Performance evaluation of a kinesthetic-tactile display p036 882-23221
Cockpit integration from a pilot's point of view p036 882-23224
Integrated cockpit for A-129 p036 882-23225
Environmental fog/rain visual display system for aircraft simulators [NASA-CASP-ABC-11159-1] p039 882-24012
New techniques in data retrieval and display --- color graphics p041 882-25174
The DFDLB Digital Flight Data readout and Processing Station and its utility p042 882-25180
Gathering and analyzing data on the British Airways Boeing 757 aircraft p042 882-25186
Conceptual design study for an advanced cab and visual system, volume 1 [NASA-CH-166235] p0410 882-25266
Conceptual design study for an advanced cab and visual system, volume 2 [NASA-CH-166236] p0410 882-25267
Source assessment system [AD-A111223] p0412 882-25613
A prototype interface unit for microprocessor-based Loran-C receiver p044 882-26210
Visual technology research simulator, visual and motion system dynamics [AD-A118001] p0457 882-26325
Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation [AD-A107225] p0463 882-27236
Scenarios for evolution of air traffic control p0467 882-27270
Cockpit display of traffic information and the measurement of pilot workload: An annotated bibliography [AD-A113637] p0470 882-27291
Advanced technology and fighter cockpit design: Which drives which? p0471 882-27302
Influence of contrast on spatial perception in TV display of moving images [F8-50] p0477 882-27609
Electronic/electric technology benefits study --- avionics [NASA-CH-165980] p0521 882-28243
Hydraulic Universal Display Processor System (UDS95) [AD-A114628] p0525 882-28294
Computer program for analysis of spherical screen distortion [AD-A113136] p0527 882-28309
Terminal information display system benefits and costs [AD-A114937] p0533 882-29291
Displays p0534 882-29300
Analysis and preparation of a digital terrain data base for flight simulator use [AD-A115547] p0559 882-30315
Evaluation of the FAA/MMIR weather data device [AD-A114646] p0562 882-30800
Pilot/vehicle model analysis of visual and motion cue requirements in flight simulation p0562 882-30838
Application of a pilot control strategy identification technique to a joint FAA/NASAGround based simulation of head up displays for CV9 aircraft p0562 882-30838
Designs, simulation and evaluation of advanced display concepts for the F-16 control configured vehicle p0563 882-30857
Separation monitoring with four types of predictors on a cockpit display of traffic information p0563 882-30859
Functional design to support CDTI/DABS flight experiments p0564 882-30860

Display Systems

**Performance evaluation of a kinesthetic-tactile display**

**Cockpit integration from a pilot's point of view**

**Integrated cockpit for A-129**

**Environmental fog/rain visual display system for aircraft simulators** [NASA-CASP-ABC-11159-1]

**New techniques in data retrieval and display --- color graphics**

**The DFDLB Digital Flight Data readout and Processing Station and its utility**

**Gathering and analyzing data on the British Airways Boeing 757 aircraft**

**Conceptual design study for an advanced cab and visual system, volume 1** [NASA-CH-166235]

**Conceptual design study for an advanced cab and visual system, volume 2** [NASA-CH-166236]

**Source assessment system** [AD-A111223]

**A prototype interface unit for microprocessor-based Loran-C receiver**

**Tanker avionics/Aircrew Complement Evaluation (PAQCM). Phase 1: Simulation evaluation Volume 1: Results** [AD-A110956]

**Visual technology research simulator, visual and motion system dynamics** [AD-A118001]

**Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation** [AD-A107225]

**Scenarios for evolution of air traffic control**

**Cockpit display of traffic information and the measurement of pilot workload: An annotated bibliography** [AD-A113637]

**Advanced technology and fighter cockpit design: Which drives which?**

**Influence of contrast on spatial perception in TV display of moving images** [F8-50]

**Electronic/electric technology benefits study --- avionics** [NASA-CH-165980]

**Hydraulic Universal Display Processor System (UDS95)** [AD-A114628]

**Computer program for analysis of spherical screen distortion** [AD-A113136]

**Terminal information display system benefits and costs** [AD-A114937]

**Displays**

**Analysis and preparation of a digital terrain data base for flight simulator use** [AD-A115547]

**Evaluation of the FAA/MMIR weather data device** [AD-A114646]

**Pilot/vehicle model analysis of visual and motion cue requirements in flight simulation**

**Application of a pilot control strategy identification technique to a joint FAA/NASAGround based simulation of head up displays for CV9 aircraft**

**Designs, simulation and evaluation of advanced display concepts for the F-16 control configured vehicle**

**Separation monitoring with four types of predictors on a cockpit display of traffic information**

**Functional design to support CDTI/DABS flight experiments**
A reconfigurable change network for distributed process control p0196 882-17097
Integrated control of mechanical system for future combat aircraft p0197 882-17108
F/A-18A tactical airborne computational subsystem p0197 882-17117
F/A-18 weapons system support facilities p0197 882-17119
Distributed intelligence for air flight control [AD-A10681 1] p0253 882-18195
Air data measurement using distributed processing and fiber optics data transmission p0446 882-26214

DISTRIBUTED PROCESSING
Enhancements and algorithms for avionic information processing system design methodology p0609 882-33385

DISTRIBUTION (PROPERTY)
NT ANTEERNA RADIATION PATTERNS
NT CURRENT DISTRIBUTION
NT DIFFUSION PATTERNS
NT FLOW DISTRIBUTION
NT FORCE DISTRIBUTION
NT FIELD DISTRIBUTION (MECHANICS)
NT INTERFERENCE LIFT
NT LOAD DISTRIBUTION (FORCES)
NT MASS DISTRIBUTION
NT PRESSURE DISTRIBUTION
NT RADIATION DISTRIBUTION
NT STRESS CONCENTRATION
NT TEMPERATURE DISTRIBUTION
NT VELOCITY DISTRIBUTION
NT VERTICAL DISTRIBUTION

DISTRIBUTION ROOFS
NT ORTHOGONALITY

DISTRICT OF COLOMBIA

DISTRIBUTION THEORY
U PERTURBATION THEORY

DITCHING (LANDING)
Improving air carrier water survival p0555 A82-44291

DIVERTIONS
U TOOLS
DIVERGENCE
Divergence of a sweptforward wing p0053 A82-13560
Aerodynamic lag functions, divergence, and the British flutter method p0433 A82-35820

DIFFERENT NOZZLES
Ground test of a large scale 'D' veined thrust deflecting nozzle [AIAA PAPER 81-2630] p0108 A82-16907

DIFFUSERS
Subsonic military aircraft engine intake: An integrated theoretical experiment design p0094 882-13073

DOCUMENTATION
Maintenance training simulator design and acquisition: ISB-derived training equipment design [AD-A110871] p0447 882-26221
Maintenance training simulator design and acquisition: Handbook of ISB procedures for design and documentation [AD-A111430] p0457 882-26321

DOCUMENTS
NT BIBLIOGRAPHIES
NT ENGINEERING DRAWINGS
NT HANDBOOKS
NT INSTALLATION MANUALS
NT MANUALS
NT PRESIDENTIAL REPORTS
NT PROCEEDINGS
NT THESIS
NT USER MANUALS (COMPUTER PROGRAMS)

DOVES (STRUCTURAL FORMS)
NT RADOMES
Wearfield aerodynamics and optical propagation characteristics of a large-scale turret model [AD-A113910] p0529 882-28624

DOORS
Developments on graphite/epoxy T-2 nose landing gear door p0495 A82-39993
Subsonic military aircraft engine intake: An integrated theoretical experiment design p0098 882-13073

DOPING (ADDITIVES)
U ADDITIVES

DOPPLER EFFECT
Doppler test results of experimental GPS receiver p0466 882-27274

DOPPLER NAVIGATION
Position extrapolation quality calculation for inertial and Doppler-ADRS navigation systems p0123 A82-10151

DOPPLER SENSORS

DOPPLER RADAR
Applications of conventional and Doppler radars for aviation safety p0003 A82-10215

DOPPLER SENSORS

DOWNWASH
Angle of downwash behind a wing in crosswind flow p0211 882-17356
Effect of downwash on the induced drag of canard-wing combinations p0298 A82-28518
Downwash behind a wing with spanwise blowing p0362 A82-33514
Surveys of flow-field around empennage of the F111 STOL-research-aircraft model [NRL-29-677] p0190 882-17124
Helicopter rotor downwash: Results of experimental research at the DPLA-rotor test
stand and their comparison with theoretical results p0228 A82-18156
An accurate method for evaluating the kernel of the integral equation relating lift to downwash in unsteady potential flow [NASA-TM-82761] p0363 A82-23194

DRAG
MT AERODYNAMIC DRAG
MT FRICTION DRAG
MT INTERFERENCE DRAG
MT MINIMUM DRAG
MT PRESSURE DRAG
MT SUPERSONIC DRAG
MT VISCOUS DRAG

DRAG EFFECT
U DRAG

DRAG MEASUREMENT
Determination of the trimmed drag of an aircraft model testing techniques for measuring inlet drag p0069 A82-102504 Wind tunnel investigations of sailplane fuselages with different nac节省 and wing settings aerodynamic drag measurement p0364 A82-222000 NASA vertical drag test report rotor systems research aircraft NASA-CR-66390 p0587 A82-32241

DRAG REDUCTION

DRAGLINES
U SHARKS (FOR ARRESTING MOTION)

DRAWINGS
MT ENGINEERING DRAWINGS Y/STOL tilt rotor research aircraft. Volume 4: CFM technical data NASA-CR-166350 p0395 A82-24197

DROGUES
U TONED ROBES

DROE AEROSCE

DROE HELICOPTERS
U DROE AIRCRAFT
U HELICOPTERS
DROE HELICOPTERS

DROE AIRCRAFT
DROP SIZE
The dispersion of drop sizes in gas turbine fuel nozzle sprays p0619 A82-12107 Water ingestion into jet engine axial compressors [AIAA PAPER 82-0196] p0117 A82-17836 Helicopter icing spray system p0177 A82-20754 Influence of airblast atomizer design features on mean drop size [AIAA PAPER 82-1073] p0516 A82-34993

A-160
DYNAMIC LOADS

An introduction to stochastic optimal control theory
p0038 A82-11076

DYNAMIC LOADS

AT AERODYNAMIC LOADS

AT FATIGUE LOADS

AT CYCLIC LOADS

AT GUST LOADS

AT IMPACT LOADS

AT LANDING LOADS

AT SHOCK LOADS

AT WING POLOMBATION LOADS

Dynamic response of aircraft structure to gun shot loadings
p013 A82-11134

Dynamic response of blades and vanes to wakes in axial turbomachinery
[AIAA PAPER 81-DET-33] p0160 A82-19307

Optimum journal bearing parameters for minimum color unbalance response in synchronous whirling
[AIAA PAPER 81-DET-55] p0161 A82-19314

An investigation of dual mode phenomena in a supported blade-disk
[AIAA PAPER 81-DET-123] p0162 A82-19347

A parametric study of dynamic response of a discrete model of turbocharger blade-disk

Determination of airplane aerodynamic parameters
p040 A82-37769

Measured pavement response to transient aircraft loadings
p0101 A82-13442

Aircraft fuel tank slosh and vibration test
p0344 A82-22164

Comparison of different fighter aircraft load spectra
[EPRI-CD-1962-02] p0470 A82-27260

Experimental investigation of active load control for aircraft landing gear
[NASA-TP-2042] p0568 A82-31321

Aeroelastic forces on the blades of stall regulated propeller type windmills
[NASA-TP-90117] p0573 A8-31718

DYNAMIC MODELS

Performance estimation from non-steady maneuvers
[AIAA PAPER 81-228] p0054 A82-13863

Development of a correlated finite element dynamic model of a complete engine
[AIAA PAPER 81-DET-79] p0161 A82-19326

Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine
[AIAA PAPER 81-DET-143] p0162 A82-19351

Analysis of aircraft dynamic behavior as a crash environment
[AIAA 82-0694] p0359 A82-30161

The maximum flying range problem for an aircraft
p0364 A82-31602

Determination of in-flight helicopter loads and vibration
[AIAA PREPRINT 81-7] p0461 A82-37762

Determination of airplane aerodynamic parameters from flight data at high angles of attack
p0508 A82-40928

Reduced nonlinear flight dynamic model of elastic structure aircraft
p0516 A82-41009

Pneumatic tire model for aircraft simulation
p0555 A82-48244

New modeling method of three-dimensional hollow photoelastic model and centrifugal stress analysis of an cooled turbine blade-tips
[NAL-TW-4277] p0037 A82-11067

DYNAMIC PRESSURE

Wind tunnel tests of ejection seat for high dynamic pressure escape
p0079 A82-16979

Gunfire blast pressure predictions
p0345 A82-22170

Static and unsteady pressure measurements on a 50 degree clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel
[NASA-TP-8297] p0363 A82-23155

DYNAMIC PROPERTIES

U DYNAMIC CHARACTERISTICS

DYNAMIC RESPONSE

AT TRANSIENT RESPONSE

Dynamic response of aircraft structure to gun shock loads
p0133 A82-11134

Dynamic response of blades and vanes to wakes in axial turbomachinery
[AIAA PAPER 81-DET-33] p0160 A82-19307

DYNAMIC LOADS

SUBJECT INDEX

[AIAA PAPER 81-DET-137] p0162 A82-19349

The dynamic behavior of propeller aerodynamics
p0276 A82-26184

Applications of adaptive control systems --- to aircraft design, industrial processes and electrical drives
p0293 A82-27869

Experimental stress analysis of a test loaded pressurized torus loaded by contact with a plane --- dynamic response of aircraft tires
[AIAA 82-0753] p0336 A82-30114

Evaluation of four subcritical response methods for on-road prediction of flutter onset in wind-tunnel tests
[AIAA 82-0644] p0337 A82-30140

Effects of dynamic stall on SWEC --- Small Wind Energy Conversion System
p0384 A82-33707

A nonlinear response analysis for coupled rotor-fanblade systems
[AIAA PREPRINT 81-23] p0443 A82-37799

Dynamic energy transfer between wind and aircraft
p0509 A82-40939

A method for determination of the aeroelastic behavior of aircraft with active control systems
[DFWLE-PS-81-95] p029 A82-10047

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion
Evaluation and wind tunnel tests of the 4,000 lb (normal-force) pitch/yaw and roll dynamic stability balance systems for measuring direct, cross, and cross-coupling derivatives
[AD-A305122] p0085 A82-12047

Estimation methods for the determination of dynamic responses of aircraft -- -- to random loads
[NAV-PEMT-81-6] p0141 A82-15037

A method for force determination from vibration response measurements --- application to turbines blades
p0143 A82-15055

Numerical and flight simulator test of the flight deterioration concept
[AIAA-CR-3500] p0193 A82-16655

Analysis methods for predicting structural response to projectile impact
p0202 A82-17162

CF6 jet engine performance improvement: High pressure turbine roundness
[AIAA-CE-16555] p0203 A82-17174

Problems of engine response during transient maneuvers
p0208 A82-17221

Rotor model for the verification of computational methods
[ISO-275] p0218 A82-17630

Dynamics of aircraft landing gear systems --- conducted at the Langley aircraft landing loads and traction facility
[NASA-TP-1959] p0254 A82-18204

A criterion for the prediction of the recovery characteristics of spinning aircraft
[EAP-TP-AERO-2251] p0267 A82-19223

Acoustic fatigue endurance test of RB8 flap structure models at elevated temperature
[NASA-TP-682] p0269 A82-19570

Vibration of structures excited acoustically
p0307 A82-20343

Dynamic response of a hot gas, control-surface actuator --- for an aircraft rudder
[AIAA-DA-599-8-108] p0320 A82-21219

Dynamic Environmental Qualification Techniques --- conference
[AGABD-CP-318] p0343 A82-22154

Development and use of dynamic qualification standards for Air Force stores
p0343 A82-22155

Qualification of equipment for gunfire-induced vibration
p0343 A82-22158

Development of vibration qualification test spectra for the F-15 aircraft
p034 A82-22160

Application of modal synthesis techniques for the dynamic qualification of wings with stores
p0345 A82-22168
A unified approach to helicopter NASTRAN modeling
[AMS PREPRINT 81-22] p0443 A82-37793
Which mode stability of the main rotor of the
TH-64 Advanced Attack Helicopter
p0458 A82-40513
EAIIP-II - A program system for the dynamic
analysis of an aeroelastic structures
p0504 A82-40884
Theoretical and experimental investigations of
joint-structural damping interaction for
airplane construction
p0516 A82-41013
An examination of the dynamics of rotary machinery
--- French thesis
p0552 A82-43724
Analysis of tapered-land hybrid aerostatic journal
bearings
p0584 A82-47944
The Shock and Vibration Digest, volume 13, no. 9
[AD-A105062] p0603 A82-10421
Structural dynamics: Modified calculations ---
natural and harmonically excited vibrations of
modified structures; increased computation
efficiency
[BWV-PSW-81-1] p0101 A82-13457
Study of ground handling characteristics of a
maritime patrol airship
[NASA-CS-166253] p0191 A82-16090
Design Manual for impact damage tolerant aircraft
structure
[AGARD-AG-238] p0202 A82-17160
Dynamic analysis of a rotor blade with flap and
lag freedom and flap-pitch coupling
[ISD-271] p0214 A82-17641
Static and dynamic investigations for the model of
a wind rotor
[ISD-272] p0214 A82-17642
Vibration qualification of external aircraft
stores and equipment
[SSID-PF-173/5/97846] p0320 A82-21218
Application of a transonic potential flow code to the
static aerodynamic analysis of
three-dimensional wings
[NASA-TB-83296] p0363 A82-23193
Historical perspectives on thermostructural
research at the NASA Langley Aeronautical
Laboratory from 1948 to 1958
p0371 A82-23894
Development of experimentally compatible subsystem
methods for the analysis of aircraft structures
[AD-A111242] p0395 A82-24198
Hybrid state vector methods for structural
aerodynamic and aerelastic boundary value problems
[NASA-CS-3591] p0567 A82-31304
Development of a rotorcraft. Propulsion dynamics
interface analysis, volume 1
[NASA-CS-166300] p0591 A82-32368
A simulation language approach to structural
interaction problems
p0614 A82-33758
DYNAMIC TESTS
An advanced facility for processing aircraft
dynamic test data
[AIAA PAPER 81-2398] p0633 A82-15377
Review of support interference in dynamic tests
[AIAA 82-0594] p0237 A82-26668
Dynamic load measurements with delta wings
undergoing self-induced roll-oscillations
[AIAA PAPER 82-1320] p0487 A82-39098
Analytic extrapolation to full scale aircraft
dynamics
[AIAA PAPER 82-1307] p0490 A82-39143
An acquisition and analysis system for dynamic
tests of air inlets
p0895 A82-13082
System for acquisition and analysis of dynamic
tests on air intakes
[NASA-TM-86646] p1013 A82-14056
Dynamic qualification testing of F-16 equipment
p0344 A82-22159
The dynamic qualification of equipment and
external stores for use with rotary winged
aircraft
p0344 A82-22167
DYNAMOMETERS
The use of dynamometer readings for damping of the
natural vibrations of twin-rotor gyrocompasses
p0298 A82-28475
E E D Y A M O N D S
U ROTATING GENERATORS
EARLY WARNING SYSTEMS
Airborne associative processor /ASPRO/ --- for
early warning radar surveillance, command, and
control applications
[AIAA 81-2145] p0002 A82-10104
AEM Namic - The Mission System Avionics
p105 A82-16556
Management of a large avionics project
p105 A82-16557
Sea-based remotely piloted vehicles. I - Issues
and concepts
p0332 A82-29714
EARTH ATMOSPHERE
MT IONOSPHERE
MT STEROSPHERE
MT THERMOSPHERE
EARTH OBSERVATIONS (FROM SPACE)
MT SATELLITE OBSERVATION
SARESAT applications
p002a A82-12598
EARTH RESOURCES
MT CRUDE OIL
MT FORESTS
MT FOSSIL FUELS
MT LIGNITE
MT SOLVENT REFINED COAL
MT VULCAN SATELLITE SATELLITES
p0490 A82-39739
ECONOMIC ANALYSIS
U MOUNTAIN EXPLORATION
ECONOMIC ANALYSIS
Greenlandair TOL transportation study
[AIAA PAPER 81-2642] p0100 A82-16912
PETOLS - We can build them, but can we sell them
p0296 A82-28281
Economic analysis for data base management
p0545 A82-42208
Why GE made a moteur d'aviation
p0578 A82-45499
Aviation meteorology in the 1980's - A trend
forecast
p0580 A82-45827
Transportation systems evaluation methodology
development and applications, phase 3
[BASA-CS-160999] p0805 A82-12051
ECONOMIC FACTORS
Adaptation and equipment of aircraft for the
fighting of forest fires
p0331 A82-29584
Air Traffic Flow Management and Air Traffic Flow
Control
p0331 A82-29584
ELASTIC DAMPING

- VISCOELASTIC DAMPING
  - Effect of the blading type on the aerodynamic damping of blade vibrations with allowance for the profile curvature

- ELASTIC PROPERTIES
  - Evaluation of the effect of elastomeric damping material on the stability of a bearingless main rotor system

- ELASTIC DEFORMATION
  - ELASTIC BENDING
    - On low-speed wind tunnels with deformable boundaries
  - ELASTIC SHELLS
    - Elastic deformation effects on aerodynamic characteristics for a high-aspect-ratio supercritical-wing model

- ELASTICITY
  - ELASTIC BODIES
    - An algorithm for computing the compliance matrices of aircraft structures by the substructure method as applied to aerelasticity problems
  - ELASTIC BUCKLING
    - Calculation of the stability and post-buckling behavior of thin shell structures using the finite element method - - German thesis
  - ELASTIC CONSTANTS
    - Dynamic characteristics of helicopter rotor blades

Subject Index

EJECTORS
- Physiological acceptability tests of the 53J-5/4 ejection seat: Second physiological acceptability demonstration
- Development of an ejection seat ballistic block for the S-3A aircraft
- Development of a supported airbag ejection restraint (SABER) for blastproof enhancement
- Development of a backpack survival kit for ejection seats
- Comparative vertical impact testing of the P/FB-111 crew restraint system and a proposed modification
- Investigation of aircrew protection during emergency ejection at dynamic pressures up to 1600 g

EJECTORS
- A high strength ejector release unit for the Tornado
- Application of thrusting ejectors to tactical aircraft having vertical lift and short-field capability
- The effect of ejector augmentation on test-section flow quality in the Calspan 8-ft transonic wind tunnel
- Theoretical optimisation and experimental verification of an ejector powered propulsion and high lift subsonic wing
- Investigation of acoustic interactions in jet thrust augmenting ejectors
- Technology overview for advanced aircraft armament system program
- Thrust augmenting ejectors: A review of the application of jet mechanics to V/STOL aircraft propulsion
- Theoretical optimisation and experimental verification of an injector
- Unsteady ejectors
- Improvement of ejector thrust augmentation by pulsating or flapping jets
- Turboprop and turbojet ejector optimisation
- An experimental investigation of the flow field of an ejector wing design employing a photon correlation laser velocimeter [NASA-D-CP-306]
- An experimental study of rectangular and circular thrust augmenting ejectors [NASA-D-CP-306]
- Diffuser/ejector system for a very high vacuum environment [NASA-CASE-RC-15791-1]
- The stability of nosocomial panels under bending
- An algorithm for calculating the compliance matrices of aircraft structures by the substructure method as applied to aerelasticity problems
- Calculation of the lift distribution and aerodynamic derivatives of quasi-static elastic aircraft
- Reduced nonlinear flight dynamics model of elastic structure aircraft
- Calculation of the stability and post-buckling behavior of thin shell structures using the finite element method - - German thesis
- Calculation of the lift distribution and aerodynamic derivatives of quasi-static elastic aircraft
- Reduced nonlinear flight dynamics model of elastic structure aircraft
- Calculation of the stability and post-buckling behavior of thin shell structures using the finite element method - - German thesis
VT NICKEL CADMIUM BATTERIES
VT STORAGE BATTERIES
ELECTRIC CHARGE
VT ELectrostatic CHARGE
Electrical ground testing of aircraft antistatic protection
ELECTRIC CIRCUITS
VT CIRCUITS
VT ELECTRIC CONNECTORS
Corrosion in naval aircraft electronic systems
ELECTRIC CONTROL
Control of electromechanical actuator elements for flight vehicles --- Russian book
On-line control for the regulation of power source in multiple-servo electro-hydraulic systems
[ASME PAPER 81-V4/DSC-3]
Applications of adaptive control systems --- to aircraft design, industrial processes and electrical drives
Electro-hydraulic nose wheel steering of the Dormier 228
Theoretical and experimental investigation of some nonlinear characteristics of electro-hydraulic servovalves --- German thesis
ELECTRIC CORONA
Electrostatic interaction of lightning with aircraft
Static charging and its effects on avionic systems
ELECTRIC CURRENT
VT ALTERNATING CURRENT
VT DIRECT CURRENT
VT EDDY CURRENTS
VT ELECTRIC CORONA
VT ELECTRIC DISCHARGES
VT LIGHTING
Aircraft potential variations in flight [OHEA, TP NO. 1982-11]
ELECTRIC DISCHARGES
VT ELECTRIC CORONA
VT LIGHTING
Static charging and its effects on avionic systems
Helicopter model studies for on-board electrostatic sensors
[AD-A105511]
ELECTRIC ENERGY STORAGE
Motor technology for electric Remotely Piloted Vehicle (RPV)
[AD-A117732]
ELECTRIC EQUIPMENT
Computer modeling of an aircraft HVDC electrical system
Computer simulation of an advanced aircraft electrical system
Aircraft electrical equipment --- Design and operation --- Russian book
ELECTRIC EQUIPMENT TESTS
High voltage surge and partial discharge test to evaluate aerospace equipment parts
ELECTRIC FIELD STRENGTHS
Calculation and measurement of electric field strength for airborne antennas in the LF/HF range
Triggered lightning --- resulting from aircraft atmospheric electricity interactions
ELECTRIC FIELDS
VT EXTERNAL SURFACE CURRENTS
Calculations of lightning return stroke electric and magnetic fields above ground
Aircraft potential variations in flight [OHEA, TP NO. 1982-11]
Aircraft warning systems for natural and aircraft-initiated lightning
ELECTRIC MOTORS
Electric field detection and ranging of aircraft
Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks
[AD-A105270]
Total/Terminal polarization ratios in a sample of 30 kHz sferics received at altitudes from 0 to 70 km
[AD-A108162]
Influence of meteorological processes on the verticality of electric fields
[AD-A111549]
Transverse electric waves for VLF/LF communication between aircraft
[AD-A115034]
ELECTRIC FILTERS
VT DIGITAL FILTERS
VT HADAM FILTERS
VT TRACKING FILTERS
Effects of filter response on analysis of aircraft noise data
[AD-A116458]
ELECTRIC GENERATORS
VT AC GENERATORS
VT DIRECT POWER GENERATORS
VT DYNAVOTORS
VT FUEL CELLS
VT ROTATING GENERATORS
A hidden advantage of permanent magnet electrical generating systems
[AD-A116458]
60 kVA ADP permanent magnet VSCF starter generator system - A program overview --- Variable Speed Constant Frequency
Aircraft electrical power systems; Proceedings of the Aerospace Congress and Exposition, Anaheim, CA, October 5-8, 1981
[SAE SP-500]
Cost of ownership advantages with a 'xed oil system
[AD-A116458]
The effect of critical design parameters on the selection of a VSCF system
Packaging the VSCF system for an aircraft engine environment
[AD-A116458]
Aircraft electric system development and test facilities
Electric Flight Systems
[NASA-CP-2209]
A propulsion view of the all-electric airplane
[AD-A116458]
Potential propulsion considerations and study areas for all-electric aircraft
[AD-A116458]
A look into the future: The potential of the all-electric secondary power system for the energy efficient transport
[AD-A116458]
The 500-Hertz constant-speed electrical generation systems
[AD-A116458]
[AD-A116458]
USAF bioenvironmental noise data handbook. Volume 162: MD-80 generator set
[AD-A116458]
ELECTRIC IMPULSES
VT ELECTRIC PULSES
ELECTRIC MOTORS
VT ASYNCHRONOUS MOTORS
VT STEPPING MOTORS
Electric Flight Systems
[NASA-CP-2209]
A propulsion view of the all-electric airplane
[AD-A116458]
Potential propulsion considerations and study areas for all-electric aircraft
[AD-A116458]
A look into the future: The potential of the all-electric secondary power system for the energy efficient transport
[AD-A116458]
Overview of Honeywell electromechanical actuation

High speed PUG containment study for VSCF system

Electric flight systems integration

Digital flight controls

Engine technology

Power systems

Electromechanical actuators

Digital flight controls

Electric flight systems integration


A study of the effect of the vehicle body potential on the characteristics of ion attitude transmitters

Aircraft potential variations in flight

Bottle technology for electric Remotely Piloted Vehicle (RPT) [AD-A117712]

The All Electric Airplane - Its development and logistic support

Electric Power

Will power-by-wire replace power-by-hydraulics

The all-electric airplane - its development and logistic support

Electric Power Conversion

U Electric Generators

Electric Power Plants

Nuclear Power Plants

Electric Power Supplies

Applications of finite element method in aerospace power system design

Advanced aircraft electric power system

Variable speed constant frequency /VSCF/ electrical system costs cut of ownership

High voltage surge and partial discharge test to evaluate aerospace equipment parts

Conceptual design of an integrated power and avionics information system

60 KVA ADP permanent magnet VSCF starter generator system - A program overview - Variable Speed Constant Frequency

High speed FME containment study for VSCF system - Permanent Magnet Generator for Variable Speed Constant Frequency applications

Computer simulation of an advanced aircraft electrical system

The all-electric airplane - a new trend

Helical rail glider launcher

Aircraft electrical equipment - Design and operation - Russian book

Power system design optimization using Lagrange multiplier techniques

Recent improvements in aircraft Na-Cd cells

Aircraft electrical power systems; Proceedings of the Aerospace Congress and Exposition, Anaheim, CA, October 5-8, 1981 [S&AE SP-500]

Design considerations of DC-Link aircraft generation systems

The effect of critical design parameters on the selection of a VSCF system

Evolution and development of high voltage /270 volt/ dc aircraft electric systems in the United States

Aircraft electric system development and test facilities

Preliminary design of an advanced integrated power and avionics information system

Models for the motor state of VSCF aircraft electric power system - Variable Speed Constant Frequency

Development of accelerated fuel-engines qualification procedures methodology, Volume 1 [AD-A113461]

Development of accelerated fuel-engines qualification procedures methodology, Volume 1: Appendices [AD-A113532]

Delta electrical load analyses C-141B JACC/CF aircraft

Electric Power Transmission

Feasibility study of a 270V dc flat cable aircraft electrical power distributed system [AD-A110026]

System data communication structures for active-control transport aircraft, Volume 1 [NASA-CR-165773-VOL-1]

Electric Propulsion

RT Laser Propulsion

RT Solar Electric Propulsion

Electric propulsion for a main BPV system

Electric Pulses

Transient measurements under electric pulse excitation in 37 Tregen aircraft [JOAC-C-3024J-A]

Electric Switches

Improvement program for the C-141 Navigation Selector Panel [AD-A11469]

Electric Welding

RT Electron Beam Welding

RT Gas Tungsten Arc Welding

RT Plasma Arc Welding

Electric Wire

The use of 'Kapton' polyimide film in aerospace applications [S&AE Paper 811091]

Electric Wiring

U Electric Wiring

U Wiring

U Electrical Conductivity

U Electrical Resistivity

Electrical Energy

U Electric Power

Electrical Engineering

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980 [AD-A104240]


USAF Summer Faculty Research Program, Volume 1: 1981 research reports [AD-A113708]

USAF Summer Faculty Research Program, Volume 2: 1981 research reports [AD-A113709]

Electrical Insulation

The use of 'Kapton' polyimide film in aerospace applications [S&AE Paper 811091]

Electrical ground testing of aircraft antisatellite protection

Electrical Measurement

Electric field detection and ranging of aircraft
Subject Index

Electrical Properties

Electrical Resistivity

Notebook on electromagnetic properties of composite materials below 1 GHa (AD-A115132)

p055 A82-30340

Electrical Resistivity

Electrical ground testing of aircraft antistatic protection

A new approach to the problem of stress corrosion cracking in 7075-T6 aluminum

p022 A82-23772

Electrical ground testing of aircraft antistatic protection

p026 A82-19156

Electro-Optics

NT Alternating Current

NT Static Electricity

Electro-optical photography

Weather impact on low-altitude imaging infrared sensors in Europe - an availability model

p007 482-14779

Target tracking using area correlation

p0490 A82-39194

Electro-optics

Design challenges of high performance aircraft POD ECM cooling systems - Electro-optical/Countermeasure

p011 A82-10894

Optical sensors for displacement measurement

p0014 A82-11407

The TADS/PWS "eyes" for the AH-64 attack helicopter

p005 482-12329

Electro-optical vector scoring system - for missile and range in fleet training exercises

p0060 A82-13945

Simulation of advanced cockpit

p0158 A82-19259

A new angular deviation measurement device for aircraft transparencies

p022 482-24308

A miniature electro-optical air flow sensor

p0543 A82-41854

High temperature electronic requirements in aeropulsion systems

p0168 A82-15313

Advanced target acquisition and tracking concepts for real time applications

p0472 A82-27305

Electroacoustic Transducers

NT Microphones

Electrochemical Cells

NT Fuel Cells

NT Lead Acid Batteries

NT Nickel Cadmium Batteries

NT Storage Batteries

Electrochemical Machining

Attack on superalloys by chemical and electrolytic processes

p0063 A82-14365

Electrochemistry

Corrosion protection schemes for aircraft structures: Some examples for the corrosion behaviour of Al alloys

p0212 A82-17364

Electrodeposition

Electroforming of space and aircraft structures

(R68-88-491-0)

p0258 A82-18419

Electrodes

NT Diffusion Electrodes

NT Solid Electrodes

Electrolyte Properties

NT Dynamic Testing

Electroexplosive Devices

NT Initiators (Explosives)

Electroforming

Electroforming of space and aircraft structures

(R68-88-911-0)

p0258 A82-18419

Electrogenerators

NT Electric Generators

NT Electric Turbine Generators

NT Hydroelectric Control

NT Electric Control

NT Hydraulic Control

Electrodynamic

Wear by generation of electrodynamic streaming currents

(AES Preprint 82-AE-6A-3)

p0443 A82-37857

Electromagnetic Noise

Electrodynamic lamps

NT Luminaires

Electrolytic Grinding

NT Electrochemical Machining

Electrodynamic Acceleration

The electromagnetic theta gun and tubular projectiles

p0125 A82-18182

Helical rail glider launcher

p0125 A82-18200

Electrodynamic Compatibility

The Navy F/A-18 Hornet electromagnetic compatibility program

p0070 A82-14976

Design and performance of airborne radomes - A review

p0106 A82-16564

Materials aspects of aircraft EMC design

p0229 A82-24358

EMC clearance of modern military aircraft

p0229 A82-24359

The testing of aircraft under near field conditions

p0229 A82-24361

Electrodynamic Control

NT ELECTROCHEMICAL

NT RESOFT CONTROL

Electromagnetic Fields

NT Far Fields

NT Near Fields

Aircraft antenna theory and design book

p0020 A82-12323

Atmospheric electricity hazards analytical model development and application. Volume 3: Electrodynamic coupling modeling of the lightning/aircraft interaction event

(AD-A1160417)

p0540 A82-29802

The interaction of radio frequency electromagnetic fields with atmospheric water droplets and applications to aircraft ice prevention

(NAVAIR-169246)

p0560 A82-30432

Electrodynamic Interactions

Coppin Tech coherent jammer flight test

(AIAA Paper 81-2452)

p0056 A82-13898

A concept for a high-accuracy, low-cost accelerometer

p0066 A82-14685

Assessment methodology of the lightning threat to advanced aircraft

p0069 A82-14759

Electromagnetic interaction of lightning with aircraft

p0432 A82-35731

The interaction of radio frequency electromagnetic fields with atmospheric water droplets and applications to aircraft ice prevention

(NAVY-169246)

p0560 A82-30432

Electrodynamic Interference

NT Atmospheric

NT Electromagnetic Noise

NT Jamming

NT Radio Frequency Interference

NT Whistlers

Fiber-optic immunity to EMI/EMP for military aircraft

[4144 PAPB 81-2505]

p052 A82-13529

Relax-synchronous data links in an interference environment

p0176 A82-20689

The coupling of electromagnetic interference into aircraft systems

p0228 A82-24354

The variation of induced currents in aircraft wiring

p0228 A82-24355

HIL-STD 1553B - Aircraft EMI environmental susceptibility effects

p0229 A82-24357

Main rotor hub electromagnetic signature reduction

p0279 A82-25393

Aircraft potential variations in flight

(JEBSA, TP No. 1982-11)

p030 482-34499

Electromagnetic Measurement

NT Electrodynamic Noise Measurement

The testing of aircraft under near field conditions

p0229 A82-24361

Calculation and measurement of electric field strength for airborne antennas in the LF/ME range

p042 482-25011

Electromagnetic Noise

NT Atmospheric
ELCETRONIC MODULES

Built-in-test Equipment Requirements Workshop...
[AD-107842] p0195 882-17085

A/W-110-135 call warning system follow-on...
[AD-108348] p0259 882-16871

Investigation of airborne VHF communication and...
[AD-107361] p0268 882-19421

Safety (aviation material)...
[AD-110361] p0303 882-20165


electronics

The modular neutrons --- for cost effective maintenance...
[AD-107361] p0294 882-27886


electronics

ELECTRONIC PHOTOGRAPHY

0 ELECTRO-OPTICAL PHOTOGRAPHY

0 ELECTRON DESCRIPTION SYSTEMS

Development of a taped random vibration technique...
[AD-107361] p0345 882-22171

ELECTRONIC SIGNAL MEASUREMENT

0 SIGNALMEASUREMENT

0 ELECTRONIC SWITCHES

0 SWITCHING CIRCUITS

ELECTRONIC TRANSUCERS

Measuring circumferential loads by means of strain...
[AD-107361] p0582 882-06619

Outsider's look at flight instrumentation...
[AD-081-25060] p0037 882-11066

ELECTRONIC WARFARE

Digital avionics systems - The RAP experience...
[AD-107361] p0117 882-11941

The TADS/PWS 'eyes' for the AH-64 attack helicopter...
[AD-106058] p0157 882-15295

Advanced fiber optic systems for avionics...
[AD-110321] p0174 882-25867

Sea-based remotely piloted vehicles. I - issues and concepts...
[AD-107361] p0294 882-27887

Hower jas - US Navy studies EW helicopter...
[AD-107361] p0312 882-29814

Electronic warfare system measure of effectiveness...
[AD-107361] p0544 882-61088

Minutes of physical configuration audit for the...
[AD-110321] p0320 882-21222

Electronics Warhcfare Avionics Integration Support...
[AD-107361] p0408 882-25289

ELECTROTHERMICS

NT ELECTRO-OPTICS

ELECTROHYDRAULIC FORCE

0 ELECTRIC CURRENT

ELECTROSTATIC CHARGE

Aircraft potential variations in flight...
[AD-1040-226] 882-34999

Generation of electrostatic charge in fuel handling systems: A literature survey...
[AD-1106056] p0157 882-10454

Electrical ground testing of aircraft anti-static protection...
[AD-107361] p0262 882-19156

ELECTROSTATIC FIELDS

0 ELECTRIC FIELDS

ELECTROSTATIC PROBE

Helicopter model studies for on-board electrostatic sensors...
[AD-1005511] p0133 882-14089

ELECTROSTATICS

Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks...
[AD-1103270] p0027 882-10033

ELECTROSTATIC PARTICLES

NT ALPHA PARTICLES

NT LIGHT BEAMS

SUBJECT INDEX

NT PHOTONS

ELEVATION ANGLE

NLS flare low elevation angle guidance considerations...
[AD-107361] p0175 882-20586

Experimental measurement of the low angle terrain scattering interference environment...
[AD-107361] p0175 882-20588

Comparison of various elevation angle estimation techniques...
[AD-107361] p0175 882-20589

ELEVATIONS (DRAWS)

0 DRAWS

ELEVATORS (CONTROL SURFACES)

Trim tab excitation system for the Saab 106...
[AD-107361] p0052 882-14363

Elevator unit for the Alpha-Jet, made from carbon-fibre reinforced plastic...
[AD-107361] p0325 882-28649

Investigation on rotating ailerons...
[AD-107361] p0413 882-26162

ELT/PHYS

Near field analysis of airborne antennas...
[AD-111057] p0561 882-30462

Geodetic paths of an ellipsoid-mounted antenna...
[AD-116451] p0596 882-32573

ELLIPSOIDAL EQUATIONS

Rapid elliptic solvers...
[AD-107361] p0580 882-15827

Generation of three-dimensional boundary-fitted curvilinear coordinate systems for wing/wing-tip geometries using the elliptic solver method...
[AD-110321] p0381 882-33318

ELLIPSOIDAL ORBITS

NT TRANSFER ORBITS

EMISSION

EMBEDDING

On embedded flow characteristics of sharp edged rectangular wings...
[AD-110321] p0531 882-29263

Singularity embedding method in potential flow calculations...
[AD-110321] p0536 882-31300

ENRICHMENT

Mechanics of corrosion fatigue --- of high strength aluminum alloys...
[AD-107361] p0210 882-17343

EMERGENCIES

Flight testing the suspended maneuvering system --- helicopter firefighting and rescue techniques...
[AD-110321] p0038 882-33860

Minutes of physical configuration audit for the...
[AD-110321] p0320 882-21222

Electronics Warhcfare Avionics Integration Support...
[AD-110321] p0408 882-25289

ELECTROSTATICS

NT ELECTRO-OPTICS

ELECTROHYDRAULIC FORCE

0 ELECTRIC CURRENT

ELECTROSTATIC CHARGE

Aircraft potential variations in flight...
[AD-1040-226] 882-34999

Generation of electrostatic charge in fuel handling systems: A literature survey...
[AD-1106056] p0157 882-10454

Electrical ground testing of aircraft anti-static protection...
[AD-107361] p0262 882-19156

ELECTROSTATIC FIELDS

0 ELECTRIC FIELDS

ELECTROSTATIC PROBE

Helicopter model studies for on-board electrostatic sensors...
[AD-1005511] p0133 882-14089

ELECTROSTATICS

Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks...
[AD-1103270] p0027 882-10033

ELECTROSTATIC PARTICLES

NT ALPHA PARTICLES

NT LIGHT BEAMS

A-172
Application of the ARC helicopter to the emergency medical service role
[IAA Paper 81-2653]
p0157 AB2-19219

Importance of a tactical cargo aircraft in emergency relief
p243 AB2-25499

An evaluation of helicopter autorotation assist concepts
p500 AB2-40524

Reflections on an F-16 in flight emergency
[AD-A116073]
p605 AB2-33358

Emergency Locator Transmitters
Status of the CODIS-ASARS project and its possible operation in conjunction with ILSASAT system
p0125 AB2-18170

Special investigation report. Search and rescue procedures and arming of emergency locator transmitter: Aircraft accident near Michigan City, Indiana, 7 December, 1980
p0188 AB2-16058

EMISSION

NT ACOUTIC EMISSION

MT EMUSSU EMISSION

MT FLUOROCIENCE

MT THERMAL EMISSION

Productive model for jet engine test cell opallcy
[AD-A117505]
p610 AB2-33397

EMISSION SPECTRA

Evaluation of plasma source spectrometers for the Air Force Oil Analysis Program
[AD-A113809]
p075 AB2-27512

EMISSIONS

Antenna (selected articles)
[AD-A108174]
p269 AB2-19408

EMOTIONAL FACTORS

Aircrew flight safety
[AGARD-LS-123]
p532 AB2-29279

EMPLOYMENT

Aircraft engineers: We're tomorrow'sinded people
[ASA-Paper 82-GR-33]
p400 AB2-25017

ERUPTIONS

Fuel microemulsions for jet engine smoke reduction
[ASAE Paper 82-GM-33]
p402 AB2-35294

ENCODING

Encoding
[AGARD-LS-123]
p532 AB2-29279

ENCIPHER ARRAYS

A new end-fire ILS glide slope
p0122 AB2-18143

ENERGY ABSORPTION

Results from tests of three prototype general aviation seats
[ASA-TR-84533]
p0613 AB2-33733

Crashworthy airframe design concepts: Fabrication and testing
[ASA-TR-3603]
p0613 AB2-33735

ENERGY CONSERVATION

Fuel conservation - DC-9 series 20/30/40
p021 AB2-12563

Airplane performance sensitivities to lateral and vertical profiles
p0083 AB2-15846

Safe and efficient management of energy:
p110 AB2-17276

Why safety --- fuel conservation through aircraft safety
p110 AB2-17277

Fuel conservation now --- improvements for existing production run transport aircraft
p111 AB2-17281

Energy savings with today's technology --- aircraft fuel management through in-flight monitoring
p111 AB2-17282

Energy conservation through airport design and management
p112 AB2-17287

Energy management and its impact on avionics:
p169 AB2-20513

General aviation fuel conservation in the 1980's
p0177 AB2-20757

Improvement of fuel economy by flying with maximum rearward center-of-gravity positioning
p221 AB2-23470

Wind and temperature database for flight planning
[ASAE Paper 811066]
p231 AB2-29385

Integration of energy management concepts into the flight deck
[ASAE Paper 811066]
p231 AB2-29387

Management of powerplant maintenance and restoration programs for fuel conservation
[ASAE Paper 811052]
p231 AB2-29394

Airframe fuel saving through J79 engine refurbishment
[ASAE Paper 811051]
p232 AB2-29395

Principles of efficient energy use at Interflug
p0380 AB2-33250

A significant role for components in energy-efficient aircraft
p0435 AB2-37065

Fuel conservation: The airline - ATC
p0483 AB2-38664

Third generation turbo fans
p0511 AB2-40964

Minimum fuel horizontal flight paths in the terminal area
p0556 AB2-44480

Cost reduction in air transportation --- energy conservation
[SAI/SA-81-150-101]
p026 AB2-10025

Analysis of integrated fuel-efficient, low-noise procedures in terminal-area operations
[DE-81-29833]
p091 AB2-13014

The use of flight management computers in air carrier operations in the 1980's
[AD-A105623]
p0132 AB2-14071

Selected advanced aerodynamic and active control concepts development
[ASA-CR-3220]
p0141 AB2-15033

Symposium on commercial-aviation energy-conservation strategies development
[ASA-CR-3220]
p0141 AB2-15033

A new end-fire ILS glide slope
p0122 AB2-18143

Aircraft energy conservation through airport ground operations
[AD-A116138]
p0589 AB2-32352

Development of a low risk augmentation system for an energy efficient transport having relaxed static stability
[ASA-CR-159166]
p0592 AB2-32377

Integrated energy management study. Energy efficient transport program
[ASA-CR-158980]
p0599 AB2-32358

The CF6 jet engine performance improvement: Low pressure turbine active clearance control
[pASA-CR-165557]
p0610 AB2-33393

Aircraft thrust/power management can save defense fuel, reduce engine maintenance costs and improve readiness
[AD-A179335]
p0615 AB2-34296

ENERGY CONSUMPTION

Characteristics and trends of energy consumption in transport missions with aircraft and surface vehicles
p009 AB2-10495

Towards minimum power for environmental control in transport aircraft
[ASAE Paper 81-BNRA-4]
p011 AB2-10892

Air transport in the 21st century
p0225 AB2-24025

ENERGY CONVERSION

p0383 AB2-33701

Effects of dynamic stall on SWEC --- Small Wind Energy Conversion System
p0389 AB2-33707

Open-cycle vapor compression heat pump
[PB-82-11053]
p0259 AB2-10553

ENERGY CONVERSION EFFICIENCY

A hidden advantage of permanent magnet electrical

A-173
ENERGY CONVERTERS

generating systems

Internal review of the Energy Efficient Engine /83/
Program
[AIAA PAPER 82-02-271] p0429 A82-35447

Energy efficient engine exhaust model technology
NASA-CR-165459 p0354 B82-22264

ENERGY CONVERTERS & DIRECT POWER GENERATORS

ENERGY DISSIPATION

A critical appraisal of some current incidence loss models for the stator and rotor of a mixed flow gas turbine
[AIAA PAPER 82-02-120] p0625 A82-35350

Aerodynamic performance of high turning core turbine vane in a two-dimensional cascade
[AIAA PAPER 82-120] p0439 A82-37716

Assessment of burning characteristics of aircraft interior materials
NASA-CR-166390 p0599 B82-32899

ENERGY EFFICIENT TRANSPORT PROGRAM

V ACE /3 PROGRAM

ENERGY EXCHANGE

ENERGY TRANSFER

ENERGY LOSSES

ENERGY DISSIPATION

STRAIN ENERGY METHODS

Energy methods used in air combat performance comparisons

The determination of critical flutter conditions of nonlinear systems
[R&D-TE-STRUCT-986] p0397 B82-24210

ENERGY POLICY

Fuel efficiency engines for large transport aircraft
[PHR-90062] p0355 B82-22276

ENERGY REQUIREMENTS

Requirements and trends in fuel consumption in transport mission with aircraft and surface vehicles

ENERGY STORAGE

ST ELECTRIC ENERGY STORAGE

ENERGY TECHNOLOGY

Hydrogen economy assessment for long-term energy systems in Japan

ENERGY TRANSFER

Prediction of aircraft interior noise using the statistical energy analysis method
[AIAA PAPER 81-DET-102] p0161 A82-19332

Conversion of centrifugal compressor performance curves considering non-similar flow conditions
[AIAA PAPER 82-02-42] p0241 A82-35200

Dynamic energy transfer between wind and aircraft

[PHR-40939] p0216 B82-17492

Aeroelastic response of a blade in pitching oscillation with partial and full separation measurement of the instantaneous pressure distribution around a vibrating blade surface in a wind tunnel

p0142 B82-15047

ENGINE AIRFRAME INTEGRATION

The design of a wind tunnel VS/STOL fighter model incorporating turbine powered engine simulators
[AIAA PAPER 82-2635] p0242 A82-25154

Method for engine-airframe integration using a high level computer-assisted engine design system of the aircraft series

p0282 B82-26487

Instability effects on pylon and engine loading in an aircraft with high-aspect-ratio wings
p0388 A82-34163

Development of a helicopter rotor/propulsion system dynamics model
[AIAA PAPER 82-07-56] p0422 A82-35311

BASIL - an interactive engine/airframe life cycle cost model
[AIAA PAPER 82-07-1087] p0416 A82-34997

EAGLE - an interactive engine/airframe life cycle cost model
[AIAA PAPER 82-07-56] p0416 A82-34997

Transonic wind tunnel test of a supercritical nozzle installation
[AIAA PAPER 82-1045] p0337 B82-37677

Helicopter Propulsion Systems
[AGARD-CP-302] p0206 B82-17203

Advanced general aviation engines/airframe integration study
NASA-CR-165565 p0354 B82-22268

-174
Optimal control application in supersonic aircraft performance

Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades

Digital full authority controls for helicopter engines

Engine controls for the 1980s and 1990s

Redundant control unit for an advanced airtaspoon engine

Optimization of dispatching discipline in queueing systems with limited queues

Sensor failure detection system --- for the F100 turbofan engine

Role of optical computers in aeronautical control applications

A redundancy concept for a digital CSAS

A helicopter handling-qualities study of the effects of engine response characteristics, height-control dynamics, and excess power on map-of-the-Earth operations

Integrated airframe propulsion control

Airfoil cooling returns to ramjets

The enhancement of heat exchanger capacity in engines / 2nd revised and enlarged edition --- Russian book

Flight test method for the determination of engine performance at high altitude with special reference to the Bolls-Boyce Gem engine

The operational characteristics of turbojets, giving particular attention to the cooled high-pressure turbine

The effect of coolant flow on the efficiency of a transonic UP turbine profile suitable for a small engine

The effect of temperature ratios on the film cooling process

Jet engine design

WT ROTOR ENGINE DESIGN

Helicopter engine technology - With particular reference to the Bolls-Boyce Gem engine

Design considerations for duty cycles, life and reliability of small limited life engines

Basic problem of aircraft gasturbine engine analytic design. II

Thermal expansion accommodation in a jet engine

Creep and aero gas turbine design

An approach to robust aircrane control design --- with illustration of J-85 turbojet engine simulation

CT7 - GE attacks coastover turboprop market

The well tempered transport aircraft engine /The Sir Henry Boyce Memorial Lecture

JSF/EP-71 propulsion integration or the great adventure into the technical unknown

Development and operating characteristics of an advanced two-stage combustor

A fuel control system designer's approach to gas turbine engine computer model validation

Development of a correlated finite element dynamic model of a complete aero engine

A CAD/CAM graphics system with relative data and tolerances

The impact of increasing energy costs upon the design philosophy of avionic fuel management systems

Advanced subsonic transport propulsion

The veil tempered transport aircraft engine /The

An approach to robust nonlinear control design

Thermal expansion accommodation in a jet engine

Helicopter engine technology - Kith particular

The effect of temperature ratios on the film cooling process

Optimal control application in supersonic aircraft performance

Digital full authority controls for helicopter engines

Engine controls for the 1980s and 1990s

Redundant control unit for an advanced airtaspoon engine

Optimization of dispatching discipline in queueing systems with limited queues

Sensor failure detection system --- for the F100 turbofan engine

Role of optical computers in aeronautical control applications

A redundancy concept for a digital CSAS

A helicopter handling-qualities study of the effects of engine response characteristics, height-control dynamics, and excess power on map-of-the-Earth operations

Integrated airframe propulsion control

Airfoil cooling returns to ramjets

The enhancement of heat exchanger capacity in engines / 2nd revised and enlarged edition --- Russian book

Flight test method for the determination of engine performance at high altitude with special reference to the Bolls-Boyce Gem engine

The operational characteristics of turbojets, giving particular attention to the cooled high-pressure turbine

The effect of coolant flow on the efficiency of a transonic UP turbine profile suitable for a small engine

The effect of temperature ratios on the film cooling process
A cost modeling approach to engine optimization [AIAA PAPER 82-1054]

Selection of a starting system for a low cost single engine fighter aircraft [AIAA PAPER 82-1043]

Improved penetrant process evaluation criteria [AGARD-CP-302]

Failure analysis of small turbofan engines [AIAA PAPER 82-10720]


Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure [NASA CR 2021]

Mechanical advances in the design of small turbofan engines [NASA CR 2021]

Mechanical advances in the design of small turbofan engines [NASA CR 2021]


Advanced component development design basis for next generation medium power helicopter engines [NASA CR 2021]

Advanced component development design basis for next generation medium power helicopter engines [NASA CR 2021]

Helicopter Propulsion Systems [NASA-CP-1971]

Military maintenance policies and procedures for high-temperature parts. Will they be adequate? [NASA CR 2021]

Engine depot maintenance repair technology [NASA CR 2021]

Engine maintenance problems in gas turbine components at the Royal Naval Aircraft Yard, Fleetlands -- helicopter and marine gas turbines [NASA CR 2021]

Maintenance experience with civil aero engines [NASA CR 2021]

Aircraft component retirement for cause [NASA CR 2021]

Defects and their effect on the behavior of gas turbine discs [NASA CR 2021]

Repair and regeneration of turbine blades and discs [NASA CR 2021]

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components [NASA CR 2021]

Advanced turbine study airfoil cooling in helicopter and marine gas turbines [NASA CR 2021]

Engine component retirement for cause [NASA CR 2021]

Aircraft component retirement for cause [NASA CR 2021]

Evaluation of an advanced two-stage combustor [AIAA PAPER 82-0191]

Performance calibration results for a Compact Multimission Aircraft Propulsion Simulator [AIAA PAPER 82-0254]

F101DFE in Toccata - Preliminary test results [NASA CR 2021]

Performance assessment of an advanced reheated turbofan [NASA CR 2021]

Reduction of the acoustic environment in an F100-PW-100 engine test cell [NASA CR 2021]

Air cooled engine test facilities [NASA CR 2021]

Pacer Cost II jet engine test system [NASA CR 2021]

Recent propulsion system flight tests at the NASA Dryden Flight Research Center [AIAA PAPER 82-2438]

Performance assessment of an advanced reheated turbofan [NASA CR 2021]

USAF bioenvironmental noise data handbook. Volume 162: 5d-600 generator set [AIAA PAPER 82-1240]

USAF bioenvironmental noise data handbook. Volume 162: 5d-600 generator set [AIAA PAPER 82-1240]

Engine testing laboratories [AIAA PAPER 82-1240]

Increased capabilities of the Langley 7 Scrane Jet Test Facility [AIAA PAPER 82-1240]

Engine tests [AIAA PAPER 82-1240]

Engine performance characteristics of a single engine fighter aircraft [AIAA PAPER 82-1043]

Selection of a starting system for a low cost single engine fighter aircraft [AIAA PAPER 82-1043]

Maintenance posture for quick start [AIAA PAPER 82-1043]

The non-synchronous whirls of the turbine rotor in aerojet engines

Intake swirl – a major disturbance parameter in engine/intake compatibility

Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion

Propulsion study for Small Transport Aircraft Technology (STAT), Appendix B

Adaptation of a turbine test facility to high-temperature research

Pollution reduction technology program small jet aircraft engines, phase 3

Development of the automated APAPL engine simulator test for lubricant evaluation

Development test programs adapted to helicopter engines

Measurement techniques used to assess the installed power of a helicopter engine

Preliminary results on performance testing of a turbocharged rotary combustion engine

CF6 Jet Engine Diagnostics Program: High pressure compressor clearance investigation

The mechanical testing of compressors and turbines for aircraft gas turbine engines -- Rolls Royce engines

Coaxial dump Bamjet combustor combustion instabilities. Part 1: Parametric test data

Performance deterioration due to acceptance testing and flight loads; J390 jet engine diagnostic program

Water ingestion into axial flow compressors. Part 3: Experimental results and discussion

Energy efficient engine: High pressure turbine uncooled rig technology report

Maintenance training simulator design and acquisition: JSB-derived training equipment design

Organizing and training for innovative flight test management

ENS AEROMAGNETIC INTERACTION OF LIGHTNING WITH

DIAGNOSTIC PROGRAMS FOR LANDING SYSTEMS

HELICOPTER ICE SIMULATION

BRAINCER SIMULATION OF LIGHTING-PROTECTION DESIGN CRITERIA

NASA/FAR Helicopter ATC simulation investigation of EK/HLS instrument approaches

Helicopter icing spray system

Centrifugal arm rain erosion test apparatus

Electromagnetic interaction of lightning with aircraft

Lightning simulation and testing

Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria

NASA/FAA Helicopter icing spray system simulation investigation of EK/HLS instrument approaches

Meteorological inputs to advanced simulators development results with emphasis on relative navigation performance

The design of a RPV ground station simulator

ENVIRONMENTAL SIMULATORS

JTIDS DISTRIBUTED TDOA/DTDBA/TERMS SYSTEM SIMULATION

The design of a RPV ground station simulator

ENVIRONMENTAL CHAMBERS

ENGINEERING DEVELOPMENT

A new RPV for medium place aircraft environmental control systems

Closed loop environmental control systems for fighter aircraft

Towards maximum power for environmental control in transport aircraft
The design of a composite main rotor blade spar for the YAH-64A composite flexbeam tail rotor Kevlar composites; Proceedings of the Symposium, El Segundo, CA, December 2, 1980.

Analysis and environmental fate of Air Force ALQ-164 POD/4V-8C environmental evaluation flight tests. Naval Research Laboratory, volume 13, no. 9.

Quantification of the thermal environment for externally carried aircraft stores and ordnance. The Global Positioning System Evaluator External Carried Stores (selected articles).

The Shock and Vibration Digest, volume 13, no. 9. (AD-A105062) p0570 A82-38479

The coupling of electromagnetic interference into aircraft systems. (AD-A105063) p0019 A82-12100

The variation of induced currents in aircraft wiring. (AD-A105064) p0031 A82-10421

Environmental exposure effects on composite materials for commercial aircraft. (NASA-CR-3502) p0193 A82-16178

Forecasting corrosion damage and maintenance costs for large aircraft. (AD-A110198) p0212 A82-17257

ALQ-164 POD/AV-8C environmental evaluation flight test (AD-A110199) p0314 A82-21178

Analyses and environmental fate of Air Force distillate and high density fuels. (AD-A110495) p0595 A82-32512

ENVIRONMENTS
NT AIR QUALITY
NT COLD WEATHER TESTS
NT CORROSION TESTS
NT HIGH TEMPERATURE TESTS
NT LOW TEMPERATURE TESTS

The work environment. (NASA-TP-1938) p0534 A82-29299

The Global Positioning System Evaluator... (selected articles).

BEPHIL
V EFFECTIVE PERCEIVED NOISE LEVELS
EPOXY COMPOUNDS
NT HOMO-EPOXY COMPOUNDS
EPOXY BAKELITE COMPOSITES


The TAH-64A composite flexible tail rotor. (NASA-TP-84067) p0279 A82-26386

Design of a composite main rotor blade spar for fabrication by tubular braiding. (NASA-TP-84068) p0279 A82-26389

Light weight adhesive joining of composite structures. (NASA-TP-84069) p0291 A82-27941

Effects of moisture on the mechanical properties of glass/epoxy composites. (AD-A103870) p0329 A82-29036

A significant role for composites in energy-efficient aircraft. (NASA-TP-84070) p0345 A82-37065

A one-shot autoclave manufacturing process for carbon epoxy components. (NASA-TP-84071) p0509 A82-40935

Development of manufacturing technology for fabrication of a composite helicopter main rotor spar by tubular braiding. (AD-A103977) p0265 A82-19209

Materials and structures/AECE (NASA-PACT-119/B-61) p0407 A82-25282

EPOXY RESINS
Effects of elastomeric additives on the mechanical properties of epoxy resin and composite systems. (NASA-TP-84072) p0113 A82-17538

A new resin for field repair. (NASA-TP-84073) p0291 A82-27412

EQUATIONS OF MOTION
NT HILLER EQUATIONS OF MOTION
NT NAVIER-STOKES EQUATIONS

Optimal flight paths for winged, supersonic flight vehicles - Extension to the case where thrust can be vectored. (NASA-TP-84074) p0005 A82-10310

On the question of trailing airplane motion. (NASA-TP-84075) p0015 A82-11470

Numerical computation of optimal atmospheric trajectories involving stepped vehicles. (NASA-TP-84076) p0019 A82-17902

An analytical technique for the analysis of airplane spin entry and recovery. (NASA-TP-84077) p0164 A82-19706

The dynamic behaviour of propeller anemometers. (NASA-TP-84078) p0276 A82-26184

Computational aerodynamics - Its coming age and its future. (NASA-TP-84079) p0332 A82-32137

Transformation relations for singularity avoidance in three-dimensional trajectory optimization. (NASA-TP-84080) p0378 A82-32137

Computer-aided derivation of equations of motion for rotary-wing aeroelastic problems. (NASA-TP-84081) p0504 A82-40883

The nonsynchronous whirls of the turbine rotor in aircraft engines. (NASA-TP-84082) p0510 A82-40944

Reduced nonlinear flight dynamic model of elastic structure aircraft. (NASA-TP-84083) p0516 A82-41009

ACTA Mechanica Sinica (selected articles). (AD-A107322) p0131 A82-10460

Flag-lag torsional dynamic of extensional and inextensional rotor blades in hover and in forward flight. (NASA-CR-165078) p0139 A82-15013

Planar equations of motion for an aircraft with free or steerable landing gears. (NASA-TP-1938) p0168 A82-23244

An aircraft sensor fault tolerant system. (NASA-CR-165076) p0407 A82-25236

User's manual for the AEREE flight path-trajectory simulation code. (NASA-PACT-29343) p0538 A82-29343

EQUATIONS OF STATE
On computing Floquet transition matrices of rotorcraft. (NASA-PACT-29344) p0013 A82-11225

EQUIPMENT
The impact of new guidance and control systems on military aircraft cockpit design. (NASA-CP-312) p0091 A82-13048

EQUIPMENT SPECIFICATIONS
A natural parameter-controller specification procedure for an integrated radio/dead reckoner navigation system. (NASA-CP-312) p0128 A82-18155

Practical aspects of instrumentation system installation, volume 13. (NASA-CP-312) p0099 A82-13140

Advanced recorder design and development. (NASA-CP-312) p0193 A82-16365
EXHAUST GASES

An experimental and analytical study of mixing flow of turbofan engine exhaust through circular and 2-dimensional mixer/nozzle [AIAA PAPER 82-0130] p0286 A82-27087

Wind tunnel test and analysis techniques using powered models for civil nacelle installation drag assessment [AIAA PAPER 82-13088]

Establishment of an experimental technique to provide accurate measurement of the installed drag of close coupled civil nacelle/airframe configurations, using a full span model with turbine powered exhaust simulators [AIAA PAPER 82-13089]

EXHAUST GASES

Study of reingestion of exhaust gases with different initial temperature in a reversed turbojet engine [AIAA PAPER 82-11444]

Methodology for determining fuel-combustion efficiency and the toxicity of exhaust gases [AIAA PAPER 82-26495]

Smoke reduction in FJ-710 turbofan engines by an airlift combustor [AIAA PAPER 82-02-24]

Gas turbine airflow control for optimum heat recovery [AIAA PAPER 82-02-83]

Exhaust emissions survey of a turbofan engine for flame holder swirl type augmentors at simulated altitude flight conditions [AIAA PAPER 82-62787]

Low NOx heavy fuel combustor concept program [AIAA PAPER 82-5255]

Forecasting aircraft condensation trails [AIAA PAPER 82-25635]

BEM analysis of engine exhaust gases [AIAA PAPER 82-30310]

Investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacity [AIAA PAPER 82-31548]

Predictive model for jet engine test cell opacity [AIAA PAPER 82-33397]

EXHAUST NOZZLES

U EXHAUST GASES

EXHAUST NOZZLES

MT CONVERGENT-DIVERGENT NOZZLES

MT TURBINE EXHAUST NOZZLES

ADEN plane flow properties for infrared analysis

ADD Augmented Deflecting Exhaust Nozzle [AIAA PAPER 82-17606]

Advanced nozzle integration for air combat fighter application [AIAA PAPER 82-1135]

Performance of a 2D-CD non-axisymmetric exhaust nozzle on a turbojet engine at altitude [AIAA PAPER 82-1137]

Application of advanced exhaust nozzles for tactical aircraft [AIAA PAPER 82-40869]

An experimental study of flow rate and thrust characteristics of a four-nozzle ejection with flow twist [AIAA PAPER 82-40809]

An investigation of F-16 nozzle-afterbody forces at transonic Mach numbers with emphasis on model scale effects [AIAA PAPER 82-36794]

Aerodynamics of Power Plant Installation [AIAA PAPER 82-37694]

Integration of advanced exhaust nozzles [AIAA PAPER 82-30655]

Advanced exhaust nozzle technology [AIAA PAPER 82-30765]

Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference [AIAA PAPER 82-30950]

Prediction of off-design performance of turbo-shaft engines using an advanced method [AIAA PAPER 82-27087]

Effects of installation of P101 DPF exhaust nozzles on the afterbody-nozzle characteristics of the F-14 airplane [NASA-TH-83250]

Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing [NASA-TP-19623]

Energy efficient engine exhaust mixer model technology [NASA-CE-156453]

Performance of multiple, angled nozzles with short mixing stack eductor systems [NASA-CE-156454]

Axysymmetric and non-axysymmetric exhaust jet induced effects on a V/STOL vehicle design. Part 2: Analysis of results [NASA-CE-166365]

Axysymmetric and non-axysymmetric exhaust jet induced effects on a V/STOL vehicle design. Part 3: Experimental technique [NASA-CE-166147]

EXHAUST SYSTEMS

Maintenance problems associated with the operation of the F402/Peacock engine in the AV-8A/Harrier/ aircraft [AIAA PAPER 82-2656]

Model test and full scale checkout of dry-cooled jet cusp dome suppressors [AIAA PAPER 82-1239]

Investigation of acoustic interactions in jet thrust augmenting ejectors [AIAA PAPER 82-35079]

Measurement techniques used to assess the installed power of a helicopter engine [AIAA PAPER 82-18133]

Engine superficial temperature and infrared signatures [AIAA PAPER 82-18136]

Energy efficient engine exhaust mixer model technology [AIAA PAPER 82-18264]

Thrust reverser concepts for axisymmetric nozzles [AIAA PAPER 82-23174]

Computer modeling of fan-inlet-splitter spacing effects on F109 response to distortion [NASA-CE-167879]

EXHAUST VELOCITY

Evaluation of the effects of model scale and test technique on jet-induced effects [AIAA PAPER 82-23246]

EXITS (DOORS)

D DOORS

EXPANDABLE STRUCTURES

MT BALLOONS

MT BELLOWS

MT HIGH ALTITUDE BALLOONS

MT INFLATABLE STRUCTURES

Flight control systems for aerial targets [AIAA PAPER 82-39745]

EXPANSION

MT SERIES EXPANSION

MT THERMAL EXPANSION

Design of airport pavements for expansive soils [AIAA PAPER 82-40887]

EXPERIENCE

Relationships between naval aviation safety and pilot flight experience [AIAA PAPER 82-11313]

EXPERIMENTAL DESIGN

Applying advanced technology to flight station design [AIAA PAPER 82-10029]

The influence of closed-coupled, rear fuselage mounted nacelles on the design of an advanced high speed wing [AIAA PAPER 82-13092]

Control of vibration in aerelastic cascade experiments [AIAA PAPER 82-15056]

La recherche Aerospatiale, Bi-monthly bulletin, number 1981-6, November-December 1981 --- aerodynamic research [AIAA PAPER 82-15056]
F-162 program overview and wind tunnel/flight correlation

A case study of reliability and maintainability of the F-16 APG-66 fire control radar

A planning system for F-16 air-to-surface missions

F-10 AIRCRAFT
Variable speed constant frequency /TSFC/
electrical system cost of ownership

F/A-18A weapon system - 1976 state of the art

F/A-18 'hornet' - one man operability

Avionics systems simulation for the Hornet

F/A-18L aircraft

F/A-18 high authority/high gain digital flight control system development and flight tunnel tests

F/A-18 Hornet reliability challenge - Status report

F/A-18 weapon system development

F/A-18 weapon system support facilities

F/A-18 Hornet reliability challenge - Status report

F/A-18 tactical airborne computer subsystem

F/A-18 weapon system development

Water tunnel flow visualization and documentation data analysis of the F/A-18 --- leading edge extension vortex effects

Aeropropulsion characteristics of fans numbers up to 2.2 of axisymmetric and nonaxisymmetric nozzles installed on an F-18 model

Rolling flow wind tunnel tests of F-18 aircraft

Curved flow wind tunnel test of F-18 aircraft

F-27 AIRCRAFT
Aircraft for secondary long range emergency ambulance flight

F-28 TRANSPORT AIRCRAFT
Develops to improve the nose and combustion emissions on the Fokker F20 aircraft and its Rolls-Royce RB133-555 engine. Section 1: development of the new internal 10-lobe mixer

F-100 AIRCRAFT
Acquisition of F-100/3/ high pressure compressor entrance profiles

Acoustic measurements of P100-PW-100 engine operating in hush house N9H 4920-02-070-2721

F-106 AIRCRAFT
Thunderstorm hazards flight research - Program overview

Operational evaluation of thunderstorm penetration test flights during project Storm Hazards '80

Investigation of severe lightning strike incidents to two USIP F-106A aircraft

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT
Pure hover flight test program

Missile-adaptive wing flight demonstration program

Aerodynamics characteristics and store loads of a 1/26 scale F-111 aircraft model with three external store loadings

Evaluation of a proposed modified F/ID-111 crew seat and restraint system

Comparative vertical impact testing of the F/ID-111 crew restraint system and a proposed modification

FAB (PROGRAMMING LANGUAGE)

Fabrication

A CAD/CAM graphics system with relative datums and tolerances

Design and fabrication of cored composite bat-stiffened panels

Fabrication of boron/aluminum fan blades for SCB engines

Development and demonstration of manufacturing processes for fabricating graphite/ARC 160 polyimide structural elements

Design and materials criteria for Kevlar-29 ribbon parachutes

The 201-3 scale F-111 aircraft model with three

Materials and design criteria for Kevlar-29 ribbon parachutes

FABRICS

BT PARACHUTE FABRICS

Technical and economic comparison of carbon fiber tape and woven fabric applications

PABY-ERGOT LASERS

ULASERS

FACTORIES

U INDUSTRIAL PLANTS

FABRICATIONS

BT SIGNAL FADING

FALL-SAFE SYSTEMS

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT

F-100 AIRCRAFT

F-106 AIRCRAFT

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT

F-100 AIRCRAFT

F-106 AIRCRAFT

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT

F-100 AIRCRAFT

F-106 AIRCRAFT

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT

F-100 AIRCRAFT

F-106 AIRCRAFT

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT

F-100 AIRCRAFT

F-106 AIRCRAFT

The 1981 direct strike lightning data --- utilizing the F-106 aircraft

F-111 AIRCRAFT
Flight-by-flight corrosion fatigue tests
A compilation of stress intensity factor solutions for flawed fastener holes
(AD-109753)
Dissipitative behavior of safety harness buckles - CTA
(AD-109948)
FATIGUE (BIOLOG)
Neural fatigue
FATIGUE (MATERIALS)
Introduction to fatigue
FATIGUE (METAL)
Fatigue life prediction
Effect of service induced cracks in a mature population of gas turbine engine bearings
Fatigue life prediction of helicopter transmission systems - a case study
Effect of fleet size on estimates of safety against airframe fatigue
A method for predicting the lifetime of gas turbine blades
Inclusions and service induced cracks in a mature population of gas turbine engine bearings
Random spectra fatigue crack life predictions with or without considering load interactions
Bolted field repair of graphite/epoxy wing skin laminates
On the sonic fatigue life estimation of skin structures at room and elevated temperatures
Application of damage tolerance technology to type certification
The Agusta's solution of ABS's hypothetical fatigue life problem
The challenge of standardizing fatigue methodology
Application of fatigue, crack propagation and strain survey testing to the CH-46 aft rotor drive shaft
A method of determining safe service life for helicopter components
Hughes helicopters - Fatigue life methodology
Fundamentals of helicopter fatigue life determination
Hypothetical fatigue life problem - Application of Aerospotiaie methodology
Boeing Vertol fatigue life methodology
A simple crack closure model for prediction of fatigue crack growth rates under variable-amplitude loading
Fracture mechanics technology applied to individual aircraft tracking - durability and structural life estimates
Evaluation of crack growth rates for service life tracking
Predictions of cyclic growth of cracks and debonds in aluminum sheets reinforced with boron/epoxy
Growth of flaw type in graphite/epoxy...composites due to fully reversed fatigue
On the characterization of damages in graphite-epoxy composites
Mechanical and metallurgical considerations in extending the life of turbine blades
Fatigue life prediction of helicopter pitch link using Kassan life calculation method
A review and assessment of fatigue crack growth rate relationships for metallic airframe materials
Turbine blade nonlinear structural and life analysis
Control of gas turbine power transients for improved turbine airfoil durability
A method for observing the deterioration of airframe life in operational conditions
FATIGUE TESTS

A roadmap toward a fatigue qualification process for modern technology helicopters

Design and experimental verification of the USB-flap structure for HAL STOL aircraft -- upper surface blinding

A crack growth model under spectrum loading

A fatigue crack growth theory based on strain energy density factor

An analogy method for crack initiation life prediction

Moisture gradient considerations in environmental fatigue of CFPR

Effect of fighter attack spectrum on composite fatigue life

Acoustic fatigue endurance test of USB flap structure models at elevated temperature

Fatigue analysis of composite materials using the fail-safe concept

Engine component retirement for cause

Defects and their effect on the behavior of gas turbine discs

Engineering property comparisons of 7050-173651, 7010-17651 and 7010-173651 aluminum alloy plate --- for aircraft construction

Comparison of different fighter aircraft load spectra

Development of a Structural Integrity Recording System (SIRS) for US Army AH-64 helicopters

Fatigue tests

Superclean superalloy powders by the rotating electrode process

Tensile fatigue assessment of candidate renders for use in fibre reinforced composite repair schemes

Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades

Process monitor helps make jet engines reliable

The challenge of standardizing fatigue methodology

NDE of composite rotor blades during fatigue testing

Fundamentals of helicopter fatigue life determination

Fatigue test of the typical main rotor component

Advanced attack helicopter fatigue testing -- overview

Sonic fatigue testing of an advanced composite aileron

Sensitivity of bonded and bolted joints in composite to load/environmental spectra variations -- in fighter aircraft structures

Production weldbonding on the A-10 aircraft

A comparison of properties of single overlap tension joints prepared by ultrasonic welding and other means

T700 - modern development test techniques, lessons learned and results

Practical application of a computerized flight by flight fatigue test system

Fasteners for composite structures

A roadmap toward a fatigue qualification process for modern technology helicopters

Application of a new hybrid material /48Al/ in aircraft structures

Structural strength of materials and parts of gas turbine engines -- Russian book

Modelling of thermal effects when deactivating the thermal fatigue life of the blades of a gas-turbine engine

Matrix analysis of wings

Design of a data acquisition and reduction system for fatigue testing

Fault tolerant aircraft electronic systems

A protective additive for jet fuels

Antwear properties of additives based on higher fatty acids --- for jet fuels

FAULT MECHANICS

Fault tolerance

Synchronous fault-tolerant flight control systems

Fault detection for two physically separated, communicating inertial measurement units

Fault isolation methodology for the L-1011 digital avionic flight control system

Computer-in-control selection logic for a triple digital flight control system

The SIFT computer and its development Software Implemented Fault Tolerance for aircraft control

A failure detection and isolation system for tactical aircraft with separated IUAs

Formal specification and mechanical verification of SIFT - A fault-tolerant flight control system

Reliability design study for a fault-tolerant electronic engine control

Generic faults and design solutions for flight-critical systems

The Shiryayev sequential probability ratio test

Analysis of computing system configurations for high integrated guidance and control systems

Production of Reliable Flight Critical Software: Validation Methods Research for Fault Tolerant Avionics and Control Systems Sub-Working Group Meeting

An aircraft sensor fault tolerant system

Control optimization, stabilization and computer algorithms for aircraft applications

Problems related to the integration of fault tolerant aircraft electronic systems

Advanced reliability modeling of fault-tolerant computer-based systems
Design and evaluation of a state-feedback vibration controller
[AIRS PREPRINT 81-10] p0042 AS2-37783

Rotor state estimation for rotocraft
[AIRS PREPRINT 81-11] p0042 AS2-37794

A simple system for helicopter individual-blade-control and its application to stall-induced vibrations alleviation
[AIRS PREPRINT 81-12] p0042 AS2-37785

Considerations of open-loop, closed-loop, and adaptive multivariable control systems
[AIRS PREPRINT 81-13] p0042 AS2-37786

Modal control of relaxed static stability aircraft
[AAIA 82-1529] p0046 AS2-38044
The use of differential pressure feedback in an automatic flight control system
[AAIA 82-1526] p0046 AS2-38981

Flight control systems using robust output observers
[AAIA 82-1575] p0046 AS2-39016

Application of multivariable model following method to flight controller
[AAIA PAPER 82-1369] p0046 AS2-39120

Design and analysis of a multivariable control system for a CCF-type fighter aircraft
[AAIA PAPER 82-1350] p0046 AS2-39121

Design of a longitudinal ride-control system by Zakai's method of inequalities
p0518 AS2-41114

Optimization in multivariable designs
[AAIA 82-2565] p0056 AS2-42565

Comparative study of flight control laws
[AAIA-CR-16491] p0027 AS2-10032

Multi-variable analysis and design techniques
[ACED-LS-117] p0029 AS2-10048

The need for multivariable design and analysis techniques
p0029 AS2-10049

Characteristic and principal gains and phases and their use as multivariable control design tools
--- generalizing Nyquist and root-locus diagram techniques
p0029 AS2-10050

Multivariable design techniques based on singular value generalizations of classical control
p0029 AS2-10051

Limitations on achievable performance of multivariable feedback systems
p0029 AS2-10052

LQG-based multivariable design: Frequency domain interpretation
p0029 AS2-10053

LQG multivariable design tools
p0030 AS2-10054

Design of high integrity multivariable systems
p0030 AS2-10055

A geometric approach to multivariable control system synthesis
p0030 AS2-10056

Multivariable designs: The optimization of approximate inverses
p0030 AS2-10057

Feedback and uniaxial sensitivity
p0030 AS2-10058

Design techniques for multivariable flight control systems
p0039 AS2-11078

Practical design and realization of a digital adaptive flight control system
p0039 AS2-11079

Experimental and analytical studies of advanced air cushion landing systems
[AAIA-CR-3476] p0087 AS2-12065

Computational methods of robust controller design for aerodynamic flutter suppression
[AAIA-CR-16491] p0087 AS2-12090

A program to evaluate a control system based on feedback of aerodynamic pressure differentials
[AAIA-CR-16491] p0087 AS2-12089

Identification of multivariable high performance turbofan engine dynamics from closed loop data
[AAIA-CR-16491] p0087 AS2-12090

Optimal terrain-following feedback control for advanced cruise missiles
[AAIA-821026] p0014 AS2-21117

Dynamic response of a hot gas, control-surface actuator --- for an aircraft rudder
Multivariable closed loop control analysis and synthesis for complex flight systems. p0347 N82-22193

Optimization of auto-pilot equations for rapid estimation of helicopter control settings [AD-A110739] p0409 N82-25263

Use of entire eigensubspace assignment with high-gain error-actuated flight control systems [AD-A111098] p0565 N82-26318

Marine Air Traffic Control and Landing System (RASCAL) investigation [AD-A107384] p0686 N82-27260

Active flutter suppression using optical output feedback digital controllers [NASA-CR-165393] p0592 N82-32375


FEBBOGBAPHI FEEDERS FEBOALLOIS FELLOWSHIP AIBCEAFT 0 IHOME ALLOTS BT GLASS FIBEB BEINFOBCED PLASTICS HI CABBOH FIBEB BEIHFOBCED PLASTICS D F-28 TBASSPOBT AIBCBAFI

Portable air driven variable speed fiber optic

Air data measurement using distributed processing

Fiber optics reporting of terminal radar and beacon signals [AD-A116403] p0574 N82-32140

FIBER OPTICS

Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades p0170 N82-20524

Damaging and stiffness of aligned continuous fiber reinforced polymer composites [AI/A 02-0712] p0335 N82-30102

Shape optimization of fiber reinforced composites [AI/A 02-0719] p0339 N82-30169

FIBER REINFORCED COMPOSITES

Effects of elastomeric additives on the mechanical properties of epoxy resin and composite systems p0113 N82-17538

Multilevel optimum design of structures with fiber-composite stiffened-panel components [AI/A PAPER 00-0723] p0113 N82-17594

Certification of civil composite aircraft structure [SAE PAPER 811061] p0231 A82-24389

NDE of composite rotor blades during fatigue testing p0239 A82-24713

Materials and aeronautics p0274 A82-26025

Fibrous composites in structural design --- Book p0287 A82-27126

Composite aircraft structures p0288 A82-27127

A Cranworthiness test for composite fuselage structure p0289 A82-27156

Mechanically-fastened joints for advanced composite -- Phenomenological considerations and simple analyses p0289 A82-27156

Damaging and stiffness of aligned discontinuous fiber reinforced polymer composites [AI/A 02-0712] p0335 A82-30102

Shape optimization of fiber reinforced composites [AI/A 02-0719] p0339 A82-30169

Failure analysis of silica phenolic nozzle liners p0391 A82-24882

Geometrical aspects of the tribological properties of graphite fiber reinforced polyamide composites [ASLE 182-37555] p0431 A82-24882

The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades p0491 A82-28263

A summary of weight savings data for composite VTOL structure p0502 A82-60546

Material and process developments on the Boeing 767 p0506 A82-60902

Material identification for the design of composite rotary wings p0509 A82-60937

Application of a new hybrid material /ABALL/ in aircraft structures p0513 A82-60975

Sliced disc design -- A composite comform concept for a turbo engine axial compressor p0515 A82-60995


Composite structural materials -- fiber reinforced composites for aircraft structures [NASA-CR-165121] p0193 N82-16182

Use of composite materials for helicopter rotor blades [PB82-12404] p0336 A82-21911

Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation [AD-A102212] p0321 A82-21261

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept [NASA-CR-16745] p0322 A82-21999

Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design and evaluation [AD-A111106] p0451 N82-26280

Fuselage structure using advanced technology fiber reinforced composites [NASA-CASE-LAB-11680-1] p0495 N82-26284

Carbon fiber reinforced composite structures protected with metal surfaces against lightning
Structural analysis of fuselages with cutouts by finite element method

Finite volume calculation of three-dimensional aerodynamic stability of rotor blades using finite element method

Evaluation of advanced air-to-air gunnery fire control systems

Large displacements and stability analysis of nonlinear structural and life analyses of a combustor liner

Vibration of structures excited acoustically

Aeroelastic stability of rotor blades using finite element analysis

ANALYSIS

The anatomy of a technology test bed - Integrated Flight/Fire Control program [SAR PAPER 01036] A-20993 A-20994

The use of 'water bombers' and chemical agents against forest fires, taking into account the economical operations for fighting forest fires in Israel

The utilization of aircraft in fighting forest fires - French experience

A planning system for F-16 air-to-surface missions

The development and applications of a full-scale wide body test article to study the behavior of interior materials during a postcrash fuel fire

Impact of advanced Avionics Technology and Ground Attack Weapon Systems

A numerical study of the turbulent flow past an isolated airfoil with trailing edge separation

The current state of technology concerning the fighting of forest fires from the air in Austria

Aeroelastic stability of rotor blades using finite element analysis

Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test

The utilization of aircraft in fighting forest fires - French experience

Modal analysis of fuselages with cutouts by finite element method

The anatomy of a technology test bed - Integrated Flight/Fire Control program [SAR PAPER 01036] A-20993 A-20994

Fire extinguishers

The anatomy of a technology test bed - Integrated Flight/Fire Control program [SAR PAPER 01036] A-20993 A-20994

The anatomy of a technology test bed - Integrated Flight/Fire Control program [SAR PAPER 01036] A-20993 A-20994

The anatomy of a technology test bed - Integrated Flight/Fire Control program [SAR PAPER 01036] A-20993 A-20994

Fire extinguishers
FIRE FIGHTING


FIRE FIGHTING


FIRE PREVENTION


FIRE RETARDANTS

Evaluation of fire retardants [NASA-CR-165001] p0010 H82-13186

FIREPROOFING


FIRE MATERIALS


FIREWORKS

0 PYROTECHNICS

FIRST AID

Importance of a tactical cargo aircraft in emergency relief [NASA-CR-165001] p0243 H82-25499

FISHPAVING

0 TAN

FITNESS

HT PHYSICAL FITNESS


FIXED WING


FIXED-MOTOR AIRCRAFT

0 AIRCRAFT CONFIGURATIONS

0 FIXED WINGS

FLAME CALORIMETERS


FLARES

0 FLARE PROPAGATION

Flare holders [NASA-CR-165001] p0415 H82-34992

FLARE EXTINGUISHMENT

0 FLARE PROPAGATION


FLAME RETARDANTS

Formulation and characterization of polyamide resilient foams of various densities for aircraft seating applications [NASA-CR-165001] p0900 H82-12230

A-198
FLIGHT CHARACTERISTICS

Analysis of augmented aircraft flight qualities through application of the Heal-Smith criterion

[NASA-CB-16312] p0377 A82-21214

A decoupled control system for improved flight performance in wind shear

Properties of the new flight and tactics simulators

[NASA-TH-78225] p0756 A82-33309

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving landing quality in lighter aircraft

[NASA-TE-80032-1] p0364 A82-22071

Optimization of thrust algorithms for Computing System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HMAT) vehicle's propulsion system

[NASA-CR-16312] p0317 A82-21216

FLIGHT ALTITUDE

On-line optimization of aircraft altitude and flight path angle dynamics

Checking and calibrating variometers in place in the sailplane instrument panel

System for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation

[NASA-CASE-PAC-11005-1] p0169 A82-16075

Optimization of thrust algorithms for Computing System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HMAT) vehicle's propulsion system

[NASA-CR-16312] p0317 A82-21216

FLIGHT CLOTHING

Evaluation of a selected group of anti-exposure garment configurations for their effects on the operational performance and survival of Naval aircrews

[NASA-TH-67606] p0452 A82-22074

On-line optimization of aircraft altitude and flying qualities for approach and landing

Rings in the sun - The evolution of Solar Challenger

Optimal dolphin hang glider flight

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving landing quality in lighter aircraft

[NASA-TE-80032-1] p0364 A82-22071

FLIGHT CLOTHING

Investigation of lower order lateral directional transfer function models for augmented aircraft

Investigation of lower order lateral directional transfer function models for augmented aircraft

[IEEE-82-1610] p0485 A82-38989

Handling qualities criteria for flight path control of V/STOL aircraft

[IEEE-PAPER 82-1292] p0486 A82-39081

In-flight investigation of large airplane flying qualities for approach and landing

[IEEE-PAPER 82-1296] p0486 A82-39083

A ground-simulation investigation of helicopter decelerating instrument approaches

[IEEE-PAPER 82-1329] p0486 A82-39106

Optimum dolphin hang glider flight

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving landing quality in lighter aircraft

[NASA-TE-80032-1] p0364 A82-22071
Communicating critical weather information to pilots

The operation of aircraft and helicopters in difficult meteorological and environmental conditions -- Russian book

Aspects of clear air turbulence severity forecasting and detection

Post analysis of aircraft accident environments

The Joint Airport Weather Studies Project

General Test Bed (GTB) aircraft

Briefs of fatal accidents involving weather as a cause/factor, D.S. general aviation, 1979

Impact of advanced avionics and munitions technology on ground attack weapons systems in night and adverse weather conditions

Attack and en route avionics for in-weather operations

Aerodynamic penalties of heavy rain on a landing aircraft

Efficient transfer of weather information to the pilot in flight

The role of avionics in the all electric airplane

Fault isolation methodology for the L-1011 digital avionics flight control system

Computer-in-control selection logic for a triple digital flight control system

Design and analysis of a digitally controlled integrated flight/fire control system

The use of separated multifunction inertial sensors for flight control

Redundancy management of skewed and dispersed inertial sensors

Development and laboratory test of an integrated sensory system/ISS/ for advanced aircraft

Enhanced F-15 air-to-ground flight demonstrations

Flight experience with a remotely augmented vehicle flight test technique

Passive terrain following using stored map and global positioning system

Design of direct digital flight-mode control systems for high-performance aircraft

USAF spin program

Robust flight control - A design example

Head-up displays - The integrity of flight information

Experience with high performance V/STOL fighter projects at NASA

The all-electric airplane - A new trend

The residue-measure criterion for model reduction in the analysis of the NASA Space Shuttle's digital flight control system

The control of aircraft gas turbines for fuel economy

The anatomy of a technology test bed - Integrated Flight/Fire Control-1 /IFFC 1/

Cooperative control tubes

Flying qualities - A costly lapse in flight-control design

Real-time failure detection of aircraft engine output sensors

Adaptive filtering for an aircraft flying in a turbulent atmosphere

Future terminal area systems

Design and flight testing of digital direct side-force control laws

Model control of relaxed static stable aircraft

Digital avionics - Concepts and concerns

Integrated avionics - What a pilot expects to see

A cost effective method for the control of roll due to side slip on a low speed aircraft

Comparison of low-speed handling qualities in ground-based and in-flight simulator tests

Experience with flight test trajectory guidance

Navigation for helicopters by multiple use of inertial sensors

Evaluation of advanced air-to-air gunery fire control systems

Passive terrain following using stored map and global positioning system

Design of direct digital flight-mode control systems for high-performance aircraft

USAF spin program

Redundancy management of skewed and dispersed inertial sensors

Development and laboratory test of an integrated sensory system/ISS/ for advanced aircraft

Enhanced F-15 air-to-ground flight demonstrations

Flight experience with a remotely augmented vehicle flight test technique

Passive terrain following using stored map and global positioning system

Design of direct digital flight-mode control systems for high-performance aircraft

USAF spin program

Robust flight control - A design example

Head-up displays - The integrity of flight information

Experience with high performance V/STOL fighter projects at NASA

The all-electric airplane - A new trend

The residue-measure criterion for model reduction in the analysis of the NASA Space Shuttle's digital flight control system

The control of aircraft gas turbines for fuel economy

The anatomy of a technology test bed - Integrated Flight/Fire Control-1 /IFFC 1/

Cooperative control tubes

Flying qualities - A costly lapse in flight-control design

Real-time failure detection of aircraft engine output sensors

Adaptive filtering for an aircraft flying in a turbulent atmosphere

Future terminal area systems

Design and flight testing of digital direct side-force control laws

Model control of relaxed static stable aircraft

Digital avionics - Concepts and concerns
A design criterion for highly augmented fly-by-wire aircraft
(AD-A062-3969)

Generic faults and design solutions for flight-critical systems
(AD-A082-1570)

A preliminary laboratory evaluation of a reconfigurable integrated flight control concept
(AD-A095-1599)

As an alternate method of specifying bandwidth for flying qualities
(AD-A095-1597)

The Sharyan sequential probability ratio test for redundancy management
(AD-A096-1523)

I-2P8 flight control system design experiences
(AD-A096-1538)

Flight control systems using robust output observers
(AD-A096-1575)

Display capability criteria for flight path control of V/STOL aircraft
(AD-A086-35081)

Application of multivariable model following method to flight controller
(AD-A086-35120)

Design and analysis of a multivariable control system for a CV-580 aircraft
(AD-A088-35125)

Perspectives of the flying qualities specification
(AD-A088-35121)

Guidance for the use of equivalent systems with MIL-F-8785C --- for aircraft flight control systems
(AD-A089-35135)

NASA Dryden's experience in parameter estimation and its use in flight test
(AD-A089-35137)

The system of 'objective control' flying quality requirements for V/STOL transition
(AD-A090-35245)

Flight-determined correction terms for angle of attack and sideslip
(AD-A090-35276)

Analytical design and validation of digital flight control system structure
(AD-A097-40290)

Design and construction of a flexible automatic electronic display device --- for flight control systems
(AD-A097-40434)

Advanced fighter technology integration program SFTI/P-16
(AD-A098-40569)

Optimal open-loop aircraft control for go-around maneuvers under wind shear influence
(AD-A098-40593)

Design integration of CCM/DSB for a sea-based aircraft
(AD-A098-40572)

Statistical analysis of piloted simulation of real time trajectory optimization algorithms
(AD-A099-43261)

Current perspectives on emergency spin-recovery systems
(AD-A054-43275)

757 system key to route flexibility
(AD-A054-43264)

Image processing in tactical flight guidance
(AD-A056-44221)

Maximum likelihood failure detection of aircraft flight control sensors
(AD-A056-44481)

High Order Languages /HOL/ for flight control applications
(AD-A057-45608)

Development and evaluation of automatic landing control laws for long wave landing STOL aircraft
(AD-A058-45690)

Flight trajectory control investigation
(AD-A058-45643)

Flight trajectory control investigation
(AD-A1045X2)

Electronic master monitor and advisory display system, human engineering summary report
(AD-A104624)

Design considerations for optimal flight control systems
(AD-A039-11077)

Design techniques for multivariable flight control systems
(AD-A039-11077)

A-202
FLIGHT PERFORMANCE

A concept for 4D-guidance of transport aircraft in the TSA - Terminal Surface Area

Estimation of the number of in-flight aircraft on instrument flight rules

Investigations concerned with shifting pilot activities to a higher hierarchical stage of flight control - German thesis

Meteorological aspects of North Atlantic flight tracks - The development of programs for minimum-time tracks

Meteorological aspects of North Atlantic flight tracks - Some interim results of the study

Loran-C navigation as an aid to aerial photographic operations

The aviation route forecast /ARP/ program - An interactive system for pilot self-briefing - of meteorological information

Automated flight data processing

Minimum fuel horizontal flight paths in the terminal area

Application of singular perturbation theory

Analysis of two air traffic samples in the terminal area of Frankfurt am Main, 3 August 1979

Automation of on-board flightpath management

Maiden and rear maiden collisions on two- and three-dimensional curvilinear flight paths

Optical aircraft landing patterns for manual noise impact

A concept for a fuel efficient flight planning aid for general aviation

Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft

Analysis and Monte Carlo simulation of near-terminal aircraft flight paths

Simulation report: Advanced display for complex flight trajectories

A result in the theory of spiral search

AUTOPILOT: A distributed planner for air fleet control

Reduction and analysis of mode C altitude data collected at high altitudes over the continental United States

Development of flying qualities criteria for single pilot instrument flight operations

User's manual for the AIREN flight path-trajectory simulation code

An analytical study of landing flare

northeast corridor helicopter area navigation accuracy evaluation

FLIGHT PERFORMANCE

0 FLIGHT CHARACTERISTICS

FLIGHT PLANS

Computer flight planning for fuel efficiency

The NASA REIIT program - Developing new concepts for accurate flight planning

Wind and temperature database for flight planning

Airline flight planning - The weather connection

Modernizing air traffic control in France

FPCS - A commercial flight management computer system

Meteorological aspects of North Atlantic flight tracks - The development of programs for minimum-time tracks

Meteorological aspects of North Atlantic flight tracks - Some interim results of the study

The use of flight management computers in air carrier operations in the 1980s

Investigation and evaluation of a computer program to minimize three-dimensional flight time tracks

A concept for a fuel efficient flight planning aid for general aviation

Weather deterioration models applied to alternate airport criteria

Meteorological impact on aviation fuel efficiency

Ozone and aircraft operations

FLIGHT LABELERS

Modern aircraft accident investigation equipment and techniques

Analysis of general-aviation accidents using VMC radar records

Advanced crash survivable flight data recorder and accident Information Retrieval System (AIRS)

Flight management computer

Ozone and aircraft operations

Modernizing air traffic control in France

The DFVLB Digital Flight Data Beadout and

Integration of a digital air data computer into BOLH computers in the flight testing of the Fokker

Complex concepts

Proceedings of the Ith symposium on aircraft integrated data systems --- conferences

Solid-state crash survivable flight data recorders for mishap investigation

New techniques in data retrieval and display --- color graphics

A new all-purpose digital flight data recorder

The DFVLB Digital Flight Data Readout and Processing Station and its Utility

An intermediate solution between basic and expanded aircraft integrated data systems (AIDS)

Flight data recovery under adverse conditions

Value of survivability and recoverability of flight data recorders - benefit cost methodology
FLIGHT SAFETY

FLIGHT SAFETY

Agricultural airplane mission time structure characteristics

[NAVAIR-79-0008] p0537 H62-29329

Chief of Naval Air Training automated management information system (CAMSIS) users guide

[NAVAIR-11-0505] p0603 H62-3280

FLIGHT RULES

FLIGHT RULES

The airplane manufacturer and meteorology in operational air traffic

[NAVMARK-25-28] p0579 A92-19534

FLIGHT SAFETY

FLIGHT SAFETY

Active beacon collision avoidance system (BCAS) logic performance during operational flight tests

[AD-A108893] p0303 H62-19203

Detection and tracking algorithm refinement

[AD-A105917] p0303 H62-20164

Operational procedures for BCAS

[NAVARM-82-2139] p0310 H62-21139

Prototype Regional Observation and Forecast System (PROFS)

[NAVARM-82-2112] p0310 H62-21142

Proposed research tasks for the reduction of human error in naval aviation mishaps

[AD-111239] p0469 H62-27241

Examination of the Federal Aviation Administration's plan for the National Airspace System

[AFA5-82-66] p0611 H62-33403

FLIGHT SIMULATION

FLIGHT SIMULATION

Real-time, on-line digital simulation of optimum maneuvers of supersonic aircraft

[NAVARM-81-2178] p0002 H62-10127

Comparison of simulation and experimental data for a gliding parachute in dynamic flight

[NAVARM-81-1924] p0006 H62-10409

Ideal and simulated performance of an aircraft in the terrain following mission

[AD-A112339] p0413 H62-11302

Fatigue life of joints under service loading - Test results and predictions

[NAVARM-81-1357] p0015 H62-11685

Airframe avionics from weapon system operational utility studies on manned Air Combat Simulators

[NAVARM-81-2230] p0047 H62-13463

Avionics systems simulation for the Northrop F/A-18L aircraft

[NAVARM-81-2294] p0049 H62-13488

The need for, and development of, a simulation facility at the Naval Air Test Center

[NAVARM-81-2466] p0058 H62-13917

Powered-lift STOL aircraft shipboard operations - A comparison of simulation, land-based and sea trial results for the QSH-4 Vertical Short-haul Research Aircraft

[NAVARM-81-2460] p0059 H62-13938

Jet V/STOL wind-tunnel simulation and groundplane effects

[NAVARM-81-1904] p0061 H62-13973

A review of flight-to-wind tunnel drag correlation

[NAVARM-81-2475] p0063 H62-14382

Evaluating sources of error in E&ER/ERNS navigation using a Kalman postprocessor - Electronically Agile Radar/Gimballed Electrically suspended gyro Airborne Navigation System

[NAVARM-81-2488] p0066 H62-14739

General purpose real-time interaction panel for digital simulation --- of flight control systems

[NAVARM-81-2560] p0074 H62-14831

Inverse SAB and its application to aircraft classification

[NAVARM-81-2560] p0075 H62-14871

Computer image generator for flight simulation

[NAVARM-81-2560] p0081 H62-15599

Piloted simulation of hover and transition of a vertical attitude takeoff and landing aircraft

[NAVARM-81-2636] p0100 H62-16610

3 DOF gyro analysis from measured and derived rates --- hypersonic trajectory simulation test

[NAVARM-82-0189] p0116 H62-17831

Simulation of phugoid excitation due to hazardous wind shear

[NAVARM-82-0215] p0117 H62-17844

Computer simulation of propulsion system performance

[NAVARM-82-0224] p0117 H62-17864

Dynamic stability of a buoyant quad-rotor aircraft --- for airlifting payloads externally on a mile-long runway

[DAGF 82-22] p0117 H62-17884

The feasibility of turnback from a low altitude engine failure during the takeoff phase

[NAVARM-82-0406] p0121 H62-17928

A real time Pegasus propulsion system model for the VSTOL piloted simulation system

[NAVARM-81-2461] p0157 H62-19221

Utilization of hybrid computational equipment for the simulation of parachute system flight

[NAVARM-81-2463] p0157 H62-19224
Flight simulators

- A terminal guidance simulator for evaluation of millimeter wave seekers
- Experience with flight simulators - Training effectiveness - future developments
- Properties of the new flight and tactics simulators
- Procurement of the new flight and tactics simulators - Experience, problems, meaning
- Requirements regarding digital external view systems for full mission flight and tactics simulators
- The procurement of flight simulators at the German Luftbansa
- Official recognition and the significance of simulators for safe flight operations
- Simulation of modern radar installations in full-mission flight and tactics simulators
- Training in the flight and tactics simulator of the Navy's Flight Simulation 3 "Graf Zeppelin"
- Report covering experience obtained at the German Luftbansa with respect to training involving the use of flight simulators
- The simulator and the airline pilot
- The use of flight simulators in l'armee de l'air
- The aircraft manufacturer's needs as a simulator user
- Automation in flight simulation of data handling and validation testing
- The effects on simulators of advances in aircraft technology
- Advanced simulation in commercial aviation
- An independent view of where civil simulation should be headed - training simulators for civil aircraft
- Simulator data test instrumentation - Flight test challenge of the eighties
- Heavy rain penalties for a flight simulator
- Low cost aircrew training devices
- Flight simulators
- Justification for, and design of, an economical programmable multiple flight simulator
- Simulator investigations of various side-stick controller/stability and control augmentation systems for helicopter terrain flight

FLIGHT SIMULATORS

- Low cost programmable multisimulator facility
- Commentary on facilities used in the development of a Sea Harrier all weather operations capability
- Comparison of low-speed handling qualities in ground-based and in-flight simulator tests
- The design and implementation of a canned scenario function for the F-16 dynamic system simulator
- Computer generated images for aircraft pilot training - ABCA aircraft
- Conceptual design study of a visual system for a rotorcraft simulator and some advances in platform motion utilization
- Environmental fog/rain visual display system for aircraft simulators
- Silicon liquid crystal light valve for flight simulator use
- Development of DFVLB in-flight simulator BFB 320 Hansa for handling qualities investigations
- A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation
- A general aviation simulator evaluation of a rate-enhanced instrument landing system display
- Study of fiber optics to enhance an environmental lighting laboratory
- Implementation of the recommendations made on the technical report titled analysis of advanced simulators for pilot training
- Numerical and flight simulator test of the flight deterioration concept
- A simple hybrid visual simulation for research flight simulators
- Tank analytic techniques: Application to the design of a flight simulator instructor/operator console
- Equipment for testing and measuring a "mounted sight and display" system with a coupled movable TV camera in the flight simulator for research of the DFVLB
- Study and design of high G augmentation devices for flight simulators
- Deterioration of visual display systems due to aging
- Computer image generation: Advanced visual/sensor simulation
- Advanced training techniques using computer generated imagery
- Operational test and evaluation handbook for aircrew training devices. Volume 3: Operational suitability evaluation
- Development of flying qualities criteria for single pilot instrument flight operations
- Development of flying qualities criteria for single pilot instrument flight operations
- Operational test and evaluation handbook for aircraft training devices. Volume 1: Planning and management
- Simulator and preparation of a digital terrain database for flight simulator use
- Computer architecture study for VITS simulators
FLIGHT STABILITY TESTS

Wide-angle, multiviewer, infinity display system
[AD-8116308] p0571 A82-31336

User's guide for the rotorcraft flight simulation computer program CH1, A6APE0 version, CDC conversion
[AD-8115801] p0594 A82-32388

A ground-motion investigation of helicopter longitudinal flying qualities for instrument approach
[NASA-AE-840225] p0611 A82-33298

Math model description for the Visual Technology Research Simulator (VTRS) conventional takeoff and landing (CTOL) weapon delivery visual system
[AD-8117141] p0611 A82-33007

FLIGHT STABILITY TESTS

The stability of maneuverable flight vehicles
[PO013 A82-28027

Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack
[AAIA PAPER 82-1295] p0486 A82-39002

NASA Dryden's experience in parameter estimation and its uses in flight test
[AAIA PAPER 82-1373] p0809 A82-39135

FLIGHT TECHNICAL ERROR

V FLIGHT ERROR

FLIGHT TEST INSTRUMENTS

A unique flight test facility - Description and results
Integrated sensor system for flight test instrumentation
[PO014 A82-41689

Outsider's look at flight instrumentation
[DE-81-04909] p0037 A82-11066

Practical aspects of instrumentation installation, volume 13
[NASA-AE-84057] p0099 A82-13140

Development of a sample, self-contained flight test data acquisition system
[NASA-CR-168438] p0213 A82-17478

FLIGHT TEST VEHICLES

A unique flight test facility - Description and results
Generic Test Bed (GTB) aircraft
[AD-8110335] p0314 A82-21176

FLIGHT TESTS

AT FLIGHT STABILITY TESTS

ST SPACE TRANSPORTATION SYSTEM FLIGHTS

Rimont onboard flight computer system architecture and qualification
[AAIA 81-2107] p0001 A82-10082

A microprocessor-based data acquisition system for orbit/alpha research
[AAIA 81-2177] p0002 A82-10126

The construction of rugged line trials technique for assessing the opening characteristics of parachutes
[AAIA PAPER 81-1932] p0003 A82-10413

Inflatable system for fast deployment of parachutes at low altitudes from slow moving aircraft or stationary supports
[AAIA PAPER 81-1953] p0004 A82-10426

Dynamic response of aircraft structure to gas shock loads
[AAIA PAPER 81-1953] p0013 A82-11314

A history of flight testing the L-1011 Frister jet transport, II - Testing highlights since initial certification of the L-1011-1
[AAIA PAPER 81-2009] p0019 A82-12049

A FAA acceptance tests on the NAVSTAR GPS S-Set receiver
[AAIA PAPER 81-2009] p0022 A82-12639

A Ring Laser Gyro Navigator /RIG/ flight test results
[AAIA PAPER 81-2009] p0023 A82-12644

On matching the systems identification technique to the particular application -- An evaluation of flight test data
[AAIA PAPER 81-2009] p0048 A82-13119

Determining hinge moments and empennage airload parameters from flight data for Learjet airplanes
[AAIA PAPER 81-2009] p0048 A82-13120

Aircraft separation assurance avionics
[AAIA 81-2239] p0047 A82-13067

The use of advanced multifunction inertial sensors for flight control
[AAIA 81-2295] p0050 A82-13502

Design and flight test of a lateral-directional command augmentation system
[AAIA 81-2295] p0050 A82-13502

POWER-LIFT TAKEOFF PERFORMANCE CHARACTERISTICS DETERMINED FROM FLIGHT TEST OF THE GJET SHORT-HAUL RESEARCH AIRCRAFT /GSAR/
[AAIA PAPER 81-2009] p0053 A82-13205

Enhanced F-15 air-to-ground flight demonstrations
[AAIA PAPER 81-2013] p0049 A82-13954

The F-16/79 test program
[AAIA PAPER 81-2014] p0049 A82-13955

Organizing and training for innovative flight test management
[AAIA PAPER 81-2016] p0049 A82-13956

Vehicle flight test technique
[AAIA PAPER 81-2017] p0049 A82-13957

A technique to detect lift and drag polar shift in flight and their applications
[AAIA PAPER 81-2020] p0054 A82-13959

Aircraft performance modeling techniques
[AAIA PAPER 81-2031] p0054 A82-13969

AIAA aerodynamic design and flight test experience
[AAIA PAPER 81-2033] p0055 A82-13977

Advancing blade concept /ABC/ development test program
[AAIA PAPER 81-2037] p0055 A82-13973

Recent propulsion system flight tests at the NASA Dryden Flight Research Center
[AAIA PAPER 81-2038] p0055 A82-13974

The Cessna T303 Crusader
[AAIA PAPER 81-2040] p0055 A82-13976

Aircraft and helicopter flight test instrumentation
[AAIA PAPER 81-2043] p0057 A82-13977

Government testing
[AAIA PAPER 81-2044] p0057 A82-13977

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[AAIA PAPER 81-2050] p0057 A82-13980

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[AAIA PAPER 81-2050] p0057 A82-13980

Information technology and its impact on test and evaluation techniques at the Naval Air Test Center
[AAIA PAPER 81-2050] p0057 A82-13989

Georgia Tech coherent jammer flight test
[AAIA PAPER 81-2052] p0057 A82-13988

Fleet Flight Loads Survey monitoring and analysis techniques
[AAIA PAPER 81-2061] p0057 A82-13993

A flight test experience with high-alpha control system techniques on the F-14 airplane
[AAIA PAPER 81-2065] p0057 A82-13994

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[AAIA PAPER 81-2065] p0057 A82-13994

Application of a microprocessor controlled cockpit display for enhanced pilot control of flight test maneuvers
[AAIA PAPER 81-2067] p0057 A82-13996

Instrumentation to determine the suitability of RAM systems for helicopter navigation in the national airspace system /NAS/
[AAIA PAPER 81-2073] p0057 A82-13996

The Air Force Flight Test Center - Utah Test and Training Range in the 1980's
[AAIA PAPER 81-2087] p0057 A82-13996

The need for, and development of, a simulation facility at the Naval Air Test Center
[AAIA PAPER 81-2094] p0057 A82-13996

A unique integrated flight testing facility for advanced control/display research
[AAIA PAPER 81-2090] p0058 A82-13997

Flight testing the suspended maneuvering system -- helicopter fire fighting and rescue techniques
[AAIA PAPER 81-2098] p0058 A82-13999

Improved techniques for the calibration and measurement of in-flight loads
[AAIA PAPER 81-2102] p0058 A82-13999

Overview of flight and ground testing with emphasis on the wind tunnel
[AAIA PAPER 81-2104] p0058 A82-13999

A high authority/high gain digital flight control system development and flight test
[AAIA PAPER 81-2106] p0058 A82-13999

A-210
The development and flight test evaluation of a intergated propulsion control system for the HIRAM research airplane

(AIAA PAPER 81-2548) p0059 A82-13931

Comparison of low-speed landing qualities in ground-based and on-flight simulator tests

(AIAA PAPER 81-2567) p0059 A82-13936

Powered-lift STOL aircraft shipboard operations - A comparison of simulation, land-based and sea trial results for the USA - Quiet Short-haul Research Aircraft

(AIAA PAPER 81-2480) p0059 A82-13938

Two at a time flight test plans for the new Boeing airliners

(AIAA PAPER 81-2376) p0059 A82-13941

Flight test concept evolution

(AIAA PAPER 81-2375) p0059 A82-13944

The development and use of a computer-interactive data acquisition and display system in a flight environment

(AIAA PAPER 81-2371) p0060 A82-13946

Automatic digital gain ranging - for flight test telemetry data

(AIAA PAPER 81-2370) p0060 A82-13947

F/A-18 Flight Test Program Overview - 1 September 1981

(AIAA PAPER 81-2351) p0060 A82-13956

Wavetar Global Positioning System flight test program overview

(AIAA PAPER 81-2350) p0060 A82-13956

Development of a lifting parachute to provide self-dispensing capability for an V/STOL project

(AIAA PAPER 81-1928) p0060 A82-13962

Status and tracking system for flight test data acquisition

(AIAA PAPER 81-2395) p0063 A82-14376

An advanced facility for processing aircraft dynamic test data

(AIAA PAPER 81-2398) p0063 A82-14377

Experience with flight test trajectory guidance

(AIAA PAPER 81-2504) p0063 A82-14379

i встретил Global Positioning System flight test program overview

(AIAA PAPER 81-2492) p0063 A82-14378

Development, design and flight test evaluation of a new airflow prediction technique

(AIAA PAPER 81-2450) p0063 A82-14381

KC-10, flight test program management - the contractor's viewpoint

(AIAA PAPER 81-2380) p0064 A82-14384

65% manned aircraft demonstrator - Next generation trainer --- cost effective pilot trainer

(AIAA PAPER 81-2519) p0064 A82-14385

Hover tests of the XV-15 Tilt Rotor Research Aircraft

(AIAA PAPER 81-2501) p0064 A82-14386

Testing capabilities of the 3244th Test Wing

(AIAA PAPER 81-2404) p0064 A82-14387

Integrated flight testing based on nonlinear system identification data processing techniques

(AIAA PAPER 81-2449) p0064 A82-14389

Applications of covariance analysis simulation to avionics flight testing

(AIAA PAPER 81-2519) p0070 A82-14767

Flight management systems for modest and high performance jet aircraft

(AIAA PAPER 81-2548) p0072 A82-14778

Flight investigation of integrated descent rate control systems

(AIAA PAPER 81-2535) p0075 A82-14927

The XV-14 - 24 years of V/STOL flight testing

(AIAA PAPER 81-2519) p0075 A82-14928

Flight investigations of integrated descent rate control systems

(AIAA PAPER 81-2548) p0076 A82-14929

USN/USP spin program

(AIAA PAPER 81-2567) p0076 A82-14931

The USAF Test Pilot School high angle of attack and spin training program

(AIAA PAPER 81-2548) p0076 A82-14932

Basic spin evaluation of the XV-15 airplane - configured with automatic maneuvering flaps

(AIAA PAPER 81-2519) p0076 A82-14933

F/A-18A high angle of attack/spin testing

(AIAA PAPER 81-2519) p0076 A82-14934

KC-10 flight test program

(AIAA PAPER 81-2519) p0076 A82-14935

The all composite Lear Fan 2100

(AIAA PAPER 81-2519) p0077 A82-14936

Acceptance testing of the Calpan variable stability Learjet

(AIAA PAPER 81-2519) p0077 A82-14937

F/A-18 roll rate improvement program

(AIAA PAPER 81-2519) p0077 A82-14938

AT-88 technical update - Leading edge root extension development

(AIAA PAPER 81-2519) p0077 A82-14940

Operational evaluation of thunderstorm penetration test flights during Project Storm Hazard '80

(AIAA PAPER 81-2519) p0078 A82-14954

Direct free-flight analysis of aircraft dynamics at high angles of attack

(AIAA PAPER 81-2519) p0081 A82-15596

F/15 aircraft flight test program - Feature Identification and location Experiment (AAS 81-041)

(AIAA PAPER 81-2519) p0105 A82-16335

Piloted simulation of hover and transition of a vertical attitude takeoff and landing aircraft

(AIAA PAPER 81-2519) p0108 A82-16910

Heli-cal helicopter approaches with microwave landing system guidance

(AIAA PAPER 81-2519) p0109 A82-16914

Determination of Learjet longhorn airplane horizonral tail load and hinge moment characteristics from flight data

(AIAA PAPER 81-2634) p0116 A82-17827

Digital flight pilot concept

(AIAA PAPER 81-2519) p0118 A82-17867

Icing analysis of an unprotected aircraft radome

(AIAA PAPER 81-2634) p0118 A82-17874

Flight measurements of area Navigation System performance using various combinations of ground aids and airborne sensors

(AIAA PAPER 81-2634) p0123 A82-18147

Post-flight assessment of the JTIDS Bell Helicopter Apex

(AIAA PAPER 81-2519) p0124 A82-18154

Evaluation of Loran-C erogeneous navigation and non-precision approaches within the State of Vermont

(AIAA PAPER 81-2519) p0124 A82-18160

F100DE in Tomcat - Preliminary test results

(AIAA PAPER 81-2519) p0126 A82-18346

Risk is offered by XV-15 tilt-rotor concept

(AIAA PAPER 81-2519) p0126 A82-19000

As an analytical technique for the analysis of airplane spin entry and recovery

(AIAA PAPER 81-2519) p0126 A82-19785

Automation in flight simulation of data handling and validation testing

(AIAA PAPER 81-2519) p0171 A82-20532

Laser communications and atmospheric link analyses

(AIAA PAPER 81-2519) p0175 A82-20615

Flight testing in the eighties: Proceedings of the Eleventh Annual Symposium, Atlanta, GA, August 27-29, 1980

(AIAA PAPER 81-2519) p0176 A82-20751

Initial F-16 carrier suitability testing

(AIAA PAPER 81-2519) p0176 A82-20752

F-16 ground and in-flight icing testing

(AIAA PAPER 81-2519) p0176 A82-20753

Development of a simple, self-contained flight data acquisition system

(AIAA PAPER 81-2519) p0177 A82-20756

Determining performance parameters of general aviation aircraft

(AIAA PAPER 81-2519) p0177 A82-20759

Torsade-aerodynamic development testing

(AIAA PAPER 81-2519) p0177 A82-20760

Design, development and flight testing of a jet powered sailplane

(AIAA PAPER 81-2519) p0178 A82-20761

Performance flight test evaluation of the Ball-Bartoe XV-1 Jetwing STOL research aircraft

(AIAA PAPER 81-2519) p0178 A82-20762

Analysis of flight test measurements in ground effect

(AIAA PAPER 81-2519) p0178 A82-20763

A comprehensive flight test flyover noise program

(AIAA PAPER 81-2519) p0178 A82-20765

Sail reduction flight test airborne data systems

(AIAA PAPER 81-2519) p0178 A82-20766

Data systems organization - A change for the better - flight test data acquisition

(AIAA PAPER 81-2519) p0178 A82-20767

Simulator data test instrumentation - flight test challenge of the eighties

(AIAA PAPER 81-2519) p0178 A82-20768
FLIGHT TESTS CONT.

The Boeing Flight Test Data System 1980

Instrumentation remote "mini" ground station

Color graphics based real-time telemetry

Aerodynamic evaluation of winglets for transport aircraft

[IAIA PAPER 81-1215]

Fuel efficient and faster 0.8, too

One year flight testing of the Transonic King Loran-C BNAT in mountainous areas

Aerodynamic coefficient identification of XT-15 - Foretelling things to come

No-tail-rotor helicopter tests continue

The helicopter Havstar GPS test program

Flight qualification of composite structures at F-15 fighter abilities evaluated

Ho-Tail-Botor helicopter

7/A-18 weapon system development

Instrumentation remote 'mini' ground station

The P4TBIOT Badar in tactical air defense

Certification of an airborne Loran-C navigation system

T700 - Modern development test techniques, lessons learned and results

In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8

Selected results of the F-15 propulsion system automation program

Evaluation of a simplified gross thrust calculation method for a J85-21 afterburning turbojet engine in an altitude facility

[IAIA PAPER 82-1047]

In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8

[IAIA PAPER 82-1120]

7700 - Modern development test techniques, lessons learned and results

[IAIA PAPER 82-1183]

Certification of an airborne Loran-C navigation system

[IAIA PAPER 82-1048]

The P4TBIOT Badar in tactical air defense

[IAIA PAPER 82-1080]

Boeing's new transports in a flight-test evaluation

[IAIA PAPER 82-1060]

Practical application of a computerized flight by flight fatigue test system

Flight demonstration of an integrated floor/fuel isolation system

[AMS PREPRINT 81-16]

Design and flight testing of digital direct side-force control laws

[IAIA PAPER 82-1215]

The ideal controlled element for real airplanes is not R/s

[IAIA 82-1606]

Avoiding the pitfalls in automatic landing control system design

[IAIA 82-1599]

Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011

[IAIA PAPER 82-1297]

A simple, low cost application of a flight test parameter identification system

[IAIA PAPER 82-3904]

The correlation of flight test and analytic W-on-W air combat exchange ratios - Many-on-Many

[IAIA PAPER 82-1328]

Unique flight characteristics of the AB-1 oblique-wing research airplane

[IAIA PAPER 82-3909]

Analysis of an aircraft windshield anti-icing system

[IAIA PAPER 82-1372]

Evaluation of CFRP prototype structures for aircraft

[IAIA 82-3910]

An evaluation of vertical drag and ground effect using the B3A rotor balance system - Rotor Systems Research Aircraft

[IAIA 82-40510]

Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability

[IAIA 82-40531]

Results of the AB-64 Structural Demonstration Flight test and testing of a digital optimal control general aviation autopilot

[IAIA 82-40551]

A concept for 4D-guidance of transport aircraft in the TMA - Terminal Maneuvering Area

[IAIA 82-4096]

Analysis of flight data in the frequency domain

Europe's best seller - Second-generation Airbus emerges

The testing of new technologies with the aid of the Alpha jet aircraft

[IAIA 82-42750]

Applied flight mechanics in the design and in flight tests

[IAIA 82-43326]

Methodology in flight tests

[IAIA 82-43327]

New technologies for future fighters

[IAIA 82-43400]

Flight test results of the model simulation of the Alpha Jet aircraft

[IAIA 82-4419]

Flight test results of the model simulation of the A310 airplane

[IAIA 82-4468]

Flight test results of the model simulation of the A310 airplane

[IAIA 82-4468]

A flight investigation of blade-section aerodynamics for a helicopter main rotor having 10-64C airfoil sections

[NASA-TR-83226]


[NASA-CP-2206]

Airborne data analysis/monitor system

[IAIA 82-14830]

ADAMS executive and operating system

[IAIA 82-14830]

On-board computer progress in development of a 310 flight testing program

[IAIA 82-14833]

Role of computers in the flight testing of the A-29 aircraft

[IAIA 82-14839]

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 1: Load alleviation/extended span development and flight tests

[NASA-CE-159097]

Differential Omega system development and evaluation

[AD-110757]
SUBJECT INDEX

Development test programs adapted to helicopter engines...  
An investigation of multi-axis isometric side-arm controllers in a variable stability helicopter...  
Measurement techniques used to assess the installed power of a helicopter engine...  
SN-608 test program...  
Evaluation of the helicopter low airspeed system...  
A design for a 32-channel multiplexer...  
Active Beacon Collision Avoidance System (ABCAS) logic performance during operational flight tests...  
Preliminary airworthiness evaluation of the OH-1B with hot metal flame plume infrared suppressor and infrared jammer...  
A preliminary comparison between the SR-3 propeller model on an flight and in a wind tunnel...  
Development of a tentative flying qualities criterion for aircraft with independent control of six degrees of freedom: Analysis and flight test...  
Experimental flight test program for improving combat aircraft maneuverability by maneuver flaps and pylon split flaps...  
Civil (French/US) certification of the Coast Guard's HH-60A Dauphin...  
Flight tests for the assessment of task performance and control activity...  
Wind-Tunnel/Flight Correlation, 1981...  
Wind-tunnel/flight-drag correlation...  
Wind-tunnel/flight-correlation program on B-70-1...  
Problems in correlation caused by propulsion system...  
Opportunities for wind-tunnel/flight correlation with new Boeing airplanes...  
F-16B program overview and wind tunnel/flight correlation...  
Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/flight-test correlated...  
Flying qualities criteria for GA single pilot IFR operations...  
Flight-test verification of a pictorial display for general aviation instrument approach...  
Mode S system accuracy...  
A-747 vortex alleviation flight tests: Ground-based sensor measurements...  
Digital image processing for acquisition, tracking, hand off and ranging...  
Advanced trending analysis/EDS data program...  
Methodology for determining engine deflections to trim and maneuver the DAST vehicle with negative static margin...  
Geophysical flight lane flying and flight path recovery utilizing the Litton LCM-76 inertial navigation system...  
Cub aircraft construction: The G 18...  
Data reduction procedures for Sea King helicopter flight trials...  
Flight tests of a GE and DC1 direct drive fly by wire flight control system...  
Optimum three-dimensional flight of a supersonic aircraft...  
Solar-powered aircraft design for long-endurance, high-altitude flight...  
Meteorological aspects of North Atlantic flight tracks - The development of programs for minimum-time tracks...  
Electronic master sensor and advisory display system test and demonstration report...  
Investigation of a computer program to minimize three-dimensional flight time tracks...  
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from 1 January 1962 to 30 June 1981...  
Agricultural airplane mission time structure characteristics...  
FLIGHT TRAINING

Properties of the new flight and tactics simulators...  
Procurement of the new flight and tactics simulators - Experience, problems, meaning...  
Official recognition and the significance of simulators for safe flight operations...  
Training in the flight and tactics simulator of the Navy Flight Squadron J 'Grumman Avenger'...  
Report covering experience obtained at the German Luftwaffe with respect to training involving the use of flight simulators...  
The use of flight simulators in I'Armee de l'Air...  
The aircraft manufacturer's needs as a simulator user...  
A European airline* s future simulator requirements...  
Computer-generated images for simulators - The cost of technology...  
Low cost aircrew training devices...  
Spa recovery training --- Licensing requirements...  
Group 1: Scenario design and development issues...  
Tank analytic techniques: Application to the design of a flight simulator instructor/operator console...  
A tactical display aid for primary flight training...  
A pilot in the loop analysis of helicopter acceleration/deceleration maneuvers...  
Operational test and evaluation handbook for aircrew training devices. Volume 3: Flight test procedures simulator...  
Operational test and evaluation handbook for aircraft training devices. Volume 2: Planning and management...  
Chief of Naval Air Training automated management information system (CAMIS) users guide...  
FLIGHT VEHICLES

Analysis and optimization of control systems in piloted flight vehicles...
FLIB DEVICES

- Problems in the automation of the thermal-stress analysis of flight vehicles
  - p005 A82-22398

- The stability of maneuverable flight vehicles
  - p029 A82-27509

Primary-data devices --- Russian book

FLIB DEVICES

- A simulator assessment of a wide field of view head-up display for presenting a FLIB sensor image during low and high attack maneuvers
  - [NASA PAPER 82-0261] p018 A82-22079

- The 1981 Range 2 Conference Proceedings
  - [AD-110226] p032 A82-21223

- Defining of display/control requirements for assault transport night/Adverse weather capability
  - p035 A82-23217

- Helicopter night vision system simulation evaluation
  - [AD-110505] p0453 A82-26292

- Alternative employment concepts for Remotely Piloted Vehicle (RPV) FLIR/TIT mission payload
  - [AD-117877] p0608 A82-33379

- Preliminary assessment of US Coast Guard Short Range Recovery System for FISB Forward Looking InfraRed (FLIR) system target detection performance
  - [AD-117916] p0615 A82-34230

FLOATING POINT INDICATORS

- A floating-point/multiple-precision processor for airborne applications
  - p058 A82-41886

- A floating-point/multiple-precision processor for airborne applications
  - [NASA-TP-84552] p0452 A82-26269

FLOATING POINT SYMANTHE

- A floating-point/multiple-precision processor for airborne applications
  - [NASA-TP-84952] p0622 A82-13992

- Application of the ONERA dynamic stall model to a helicopter blade in forward flight
  - [ONERA, TP NO. 1981-89] p0662 A82-13992

- Flow characteristics
  - NT BOUNDARY LAYER STABILITY
  - NT FLAME STABILITY
  - NT FLOW DISTRIBUTION
  - NT FLOW STABILITY
  - NT FLOW VELOCITY

- Symmetric flow characteristics of thin rectangular wings
  - p0103 A82-16093

- Analysis of an ideal-fluid flow past a finite-thickness wing
  - p0165 A82-19813

- The effect of induced sound on the flow around a rectangular body in a wind tunnel
  - p0276 A82-26194

- Incopressible symmetric flow characteristics of sharp-edged rectangular wings
  - p0379 A82-32850

- Effects of dynamic stall on SWECS --- Small Wind Energy Conversion System
  - p038 A82-33707

- CFD technology for propulsion installation design
  - p0420 A82-35289

- Conversion of centrifugal compressor performance curves considering non-similar flow conditions
  - [ASME PAPER 82-GT-42] p0421 A82-35000

- Design and investigations of a three-dimensionally twisted diffuser for centrifugal compressors
  - [ASME PAPER 82-GT-102] p0424 A82-35339

- Current techniques for jet engine test cell modeling
  - [ASME PAPER 82-GT-42] p0422 A82-35339

- Symposium on Flows with Separation, Stuttgart, West Germany, November 23-25, 1981, Reports
  - p0483 A82-38781

- The influence of closed-coupled, rear fuselage mounted nacelles on the design of an advanced high speed wing
  - p006 A82-13092

- Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CF4 tunnel
  - [NASA-TP-8320] p0146 A82-15359

- Development of a computer based presentation of non-steady helicopter rotor flows
  - [AD-118107] p0199 A82-17131

- Rotors flow research in low speed helicopter flight
  - [AD-1107871] p0199 A82-17132

- Survey on diffusion factors and profile losses
  - p024 A82-17106

- The role of coherent structures in the generation of noise for subsonic jets
  - [NASA-CR-168764] p0358 A82-22947

- Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations
  - [NASA-CR-166196] p0367 A82-23234

- Blockage and flow studies of a generalized test apparatus including various wing configurations in the Langley 7-Inch Mach 7 Pilot Tunnel
  - [NASA-TP-3301] p0370 A82-23417

- On embedded flow characteristics of sharp edged rectangular wings
  - [LOG-C4712] p0531 A82-29263

- Flow and acoustic properties of low Reynolds number unexpanded supersonic jets
  - [NASA-CR-16257] p0557 A82-30288

FLOW CHAMPS

- Interactive-graphic flowpath plotting for turbine engines
  - [NASA-TP-8256] p0142 A82-15041

FLOW COEFFICIENTS

- NT DISCHARGE COEFFICIENT

- Experimental study on discharge and loss coefficients of combustor swirlers
  - p0390 A82-34644

FLOW DIRECTION INDICATORS

- NT WIND VANKS

- The design of a jet catcher --- for wind tunnels
  - [ASME-TP-82-1085] p0435 A82-14102

- A color video display technique for flow field surveys
  - p0596 A82-32669

FLOW DISTORTION

- On evaluating the influence of local disturbances of flow over trailing edge and leading edge flaps from the data of wind tunnel tests of a rectangular wing segment
  - p015 A82-11465

- Measurement of the influence of flow distortions on the blade vibration amplitude in an air turbine
  - p032 A82-19348

- Comments on 'Nature of inlet turbulence and strut flow distortions and their effect on turbojet engine noise'
  - p034 A82-13920

- An asymptotic theory of separated flow past low-aspect-ratio wings
  - p0581 A82-46135

- Amplified crosflow disturbances in the laminar boundary layer on swept wings with suction
  - p0811 A82-11391

- A method for designing inlet distortion screens for aircraft gas turbine engine tests using an
The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel [PH-263].

Experimental methods for the prediction of the effect of viscosity on propeller performance [AD-A100944].

The modeling and prediction of multiple jet VKOL aircraft flow fields in ground effect [PAS-CR-166-187].


Automated design of minimum drag light aircraft fuselages and nacelles [NASA-CR-16891].

Self streamlining mad tunnels without computers [NASA-CR-166-258].

Study of VKOL in ground-effect flow field including temperature effect [NASA-CR-166-258].

An experimental investigation of the flow field of an ejector wing design employing a photon correlation laser velocimeter [AD-111154].

Surface generation for aerodynamic applications [AD-111623].

Flow and pressure field of a model propeller [NASA-TR-76660].

A prescribed wake rotor inflow and flow field prediction analysis, user's manual and technical approach [NASA-CR-165-898].

A color video display technique for flow field surveys [NASA-CR-165-898].

Propeller flow visualization techniques [NASA-CR-165-898].

Flow field studies using holographic interferometry at Langley [NASA-CR-165-898].

LV measurements with an advanced turboprop [NASA-CR-165-898].

Subject Index

Flow equations

Three-dimensional flows in a suddenly accelerated air stream

The use of optimization techniques to design controlled diffusion compressor blading [AIAA-TH-82-308].

A computer program for variable-geometry single-stage axial compressor test data analysis [AD-A106676].

Fluid dynamics of jets with applications to VSTOL [AGARD-CP-308].

Flowfield and noise sources of jet impingement on flat and ground surface [NASA-CR-169345].

The modeling and prediction of multiple jet VKOL aircraft flow fields in ground effect [NASA-CR-169345].

Jet effects on forces and moments of a VSTOL fighter type aircraft [NASA-CR-169345].

Curved flow wind tunnel test of F-18 aircraft [NASA-CR-169345].

Flow measurement

Calibration of seven-hole probes suitable for high angles in subsonic compressible flows [AIAA-TH-82-0410].

U flow distribution

Boundary layer transducers /\(\xi\)/ developed for the study of the flow over helicopter rotor blades [ONRCA, TP NO. 1901-93].

Secondary flow mixing losses in a centrifugal impeller [AIAA-TH-82-0410].

Turbulence measurements in a confined jet using a six-channel hot wire probe technique [AIAA-TH-82-0410].

Boundary layer transducers /\(\xi\)/ developed for the study of the flow over helicopter rotor blades [ONRCA, TP NO. 1901-93].

Secondary flow mixing losses in a centrifugal impeller [AIAA-TH-82-0410].

A comprehensive method for preliminary design optimization of axial gas turbine stages [AIAA-TH-82-0410].

The use of optimization techniques to design controlled diffusion compressor blading [AIAA-TH-82-0410].

A computer program for variable-geometry single-stage axial compressor test data analysis [AD-A106676].

Fluid dynamics of jets with applications to V/STOL [AGARD-CP-308].

Flowfield and noise sources of jet impingement on flat and ground surface [NASA-CR-169345].

The modeling and prediction of multiple jet VKOL aircraft flow fields in ground effect [NASA-CR-169345].

Jet effects on forces and moments of a VSTOL fighter type aircraft [NASA-CR-169345].

Curved flow wind tunnel test of F-18 aircraft [NASA-CR-169345].
FLOW VISUALIZATION

Experimental study of subsonic and transonic flows past a wing
Experimental studies of the Euler 61 airfoil at low Reynolds numbers
[IAEA PAPER 82-0345] p0164 A82-19796
Endwall boundary layer flows and losses in an axial turbine stage
p0168 A82-20298
Boundary layer transition and separation on a compressor rotor airfoil
p0168 A82-20299
Flow visualization using a computerized data acquisition system
Visualizatoin of flow separation and separated flows with the aid of hydrogen bubbles
p0179 A82-20792
Visualizatoin of laminar separation by oil film method
Quantitative interpretation of recirculated flow visualization by the analaysis of video pictures
More than meets the eye - The oil dot technique
An experimental investigation of leading-edge spanwise blowing
Effects of vortex flaps on the low-speed aerodynamic characteristics of an arrow wing
Application of image processing techniques to fluid flow data analysis
Vortex flow correlation - Water tunnel tests on thin slender wings
Surface flow visualization requirements for testing in HTF
Operational flow visualization techniques in the Langley Unitary Plan Wind Tunnel
Propellor flow visualization techniques
In-flight propellor flow visualization using fluorescent miniatures
Shadowgraph techniques in transonic tests with powered nacelles
Transonic applications of the Wake Imaging System
Flow visualization in the Langley 0.3-meter Transonic Cryogenic Tunnel and preliminary plans for the National Transonic Facility
Holographic interferometry and tomography at Ames Research Center
Flow field studies using holographic interferometry at Langley

FLOWMETERS

A miniature electro-optical air flow sensor
Advanced fuel flowmeter for future naval aircraft

FLUID BOUNDARIES

ST GAS-SOLID INTERFACES
ST JET BOUNDARIES
ST LIQUID-SOLID INTERFACES

FLUID DYNAMICS

ST AERODYNAMICS
ST AEROTHERMODYNAMICS
ST COMPUTATIONAL FLUID DYNAMICS
ST GAS DYNAMICS
ST HYPERSONICS
ST MAGNETOTHERMODYNAMICS
ST MOTOR AERODYNAMICS
ST VORTEX SHEDDING

FLUID FILMS

ST SQUEEZE FILMS

FLUID FLOW

ST AIR FLOW
ST AIR JETS
ST ABLATIVE FLOW
ST AXIAL FLOW
ST AXISYMMETRIC FLOW
ST BASE FLOW
ST BOUNDARY LAYER FLOW
ST BOUNDARY LAYER SEPARATION
ST CASCADE FLOW
ST CATAMARAN FLOW
ST CHANNEL FLOW
ST COAXIAL FLOW
ST COMPRESSIBLE FLOW
ST CORIOLIS FLOW
ST CORSET FLOW
ST CORNER FLOW
ST DUCTED FLOW
ST FREE FLOW
ST FUEL FLOW
ST GAS FLOW
ST HYPERSONIC FLOW
ST INCOMPRESSIBLE FLOW
ST INLET FLOW
ST INVISCID FLOW
ST ISOCTRLICAL FLOW
ST JET FLOW
ST JET MIXING FLOW
ST LARIMAX FLOW
ST LIQUID FLOW
ST MASS FLOW
ST MULTIPHASE FLOW
ST NUNIFORM FLOW
ST NOZZLE FLOW
ST ORIFICE FLOW
ST OSCILLATING FLOW
ST PARALLEL FLOW
ST RADIAL FLOW
ST REATTACHED FLOW
ST RECIRCULATORY FLOW
ST REVISED FLOW
ST SECONDARY FLOW
ST SEPARATED FLOW
ST SHEAR FLOW
ST SMALL PERBTURBATION FLOW
ST STAGNATION FLOW
ST STEADY FLOW
ST SUBSONIC FLOW
ST SUPERCRITICAL FLOW
ST SUPERSONIC FLOW
ST SUPERSONIC JET FLOW
ST THREE DIMENSIONAL FLOW
ST TRANSITION FLOW
FOREIGN POLICY

FOREIGN POLICY
BY INTERNATIONAL COOPERATION

FOREIGN TRADE
Future of general and computer aviation technology
and trade
[GP0-85-832] p0302 H82-20159

FOREIGN (Turbocharged) helicopter production:
A threat to the United States production base
[AD-1116755] p0585 H82-32305

FORENSIC SCIENCE
U LAW (JURISPRUDENCE)

FOREST FIRES
Fighting fire and other disasters from the air;
International Scientific-Technical Symposium,
Hanover, West Germany, June 11, 12, 1980, Reports
p0330 A82-29576

Fighting forest fires with the aid of aircraft in
the United States of America
p0330 A82-29577

Fighting forest fires - A task for the Swiss air
force
p0330 A82-29578

The current state of technology concerning the
fighting of forest fires from the air in Austria
p0330 A82-29579

The utilization of agricultural aircraft in
ecological operations for fighting forest fires in
Israel
p0331 A82-29580

The utilization of aircraft in fighting forest fires - French experience
p0331 A82-29581

The use of 'water bombers' and chemical agents
against forest fires, taking into account the
employment of a first-attack system
p0331 A82-29582

The employment of two-engine and four-engine
aircraft for dropping the latest chemical fire
extinguishing agents in connection with the
fighting of forest fires
p0331 A82-29583

Adaptation and equipment of aircraft for the
fighting of forest fires
p0331 A82-29584

FORESTS
MAPPING IN TROPICAL FORESTS - A new approach using
the laser AFB --- Airborne Profile Recorder
p0168 H82-20407

FOGGING
MATERIAL FLOW AND DEFECT FORMATION IN FORMING
an airfoil shape from metal-matrix composites
p0365 A82-31995

Practical applications of fracture mechanics
[AGARD-AD-297] p0269 H82-19571

International aviation (selected articles)
[AD-1114422] p0521 H82-28245

FORENS
OT-10A nose gear fork damage analysis
[AD-1111492] p0407 H82-25284

FORM PERCEPTION
U SPACE PERCEPTION

FORGING TECHNIQUES
BT CASTING
BT ELECTROFORMING
BT FORGING
BT PRESSING (FORGING)
BT FULLERISATION
BT STAMPING
Sheet materials - Fabrication and joining --- for
gas turbine engine components
p0325 A82-28594

SPF of high strength aluminium structures ---
superplastic forming for complex aircraft structures
p0326 A82-28977

Forrability of metallic materials - 2000 A.D.;
Proceedings of the Symposium, Chicago, IL, June
24, 25, 1980
p0385 A82-31989

Net shape components for small gas turbine engines
[ASB PAPER 82-07-96] p0248 H82-35338

Adaptation of diffusion to the manufacture of
helicopter components
p0501 A82-40537

Evaluation of superplastic forming and
co-diffusion bonding of T1-6AI-4V titanium alloy
p0268 H82-19358

Laminar flow control SPP/08 feasibility
[NASA-CH-165827] p0322 H82-21532

FOREST
A generalized escape system simulation computer
program: A user's manual
[AD-1104152] p0187 H82-16055

S55XT: A computer code for predicting multistage
axial flow compressor performance by a streamline
stage stacking method
[NASA-TP-2520] p0408 H82-25250

Design of advanced digital flight control systems
via Command Generator Tracker (CGT) synthesis
methods, volume 2
[AD-113511] p0570 H82-31332

FORAGE DETECTORS
U PLATE DETECTORS

FOSSIL FUELS
U CRUDE OIL
U LIGNEITE
U NATURAL GAS
U SOLVENT REFINED COAL
Baseline data on utilization of low-grade fuels in
gas turbine applications. Volume 3: Emissions
[DE81-903764] p0301 H82-10254

FOULING
U ANTIFOULING

FOUNDBATIONS
Design of airport pavements for expansive soils
[AD-108460] p0041 H82-11313

FOURIER ANALYSIS
U FOURIER SERIES

FOURIER SERIES
The application of subsonic theoretical
aerodynamics to active controls --- aircraft
controls
[A4E-TR-81060] p0320 H82-21217

FOURIER TRANSFORMATION
The effect of aspect ratio on the unsteady
aerodynamic forces induced by vibration of a
cascade blade
p0144 H82-15063

FRACTIONATION
U HYDROCRACKING

FRACITOGRAPHY
Practographic determination of fatigue crack
growth rates in aircraft components
p0023 H82-12697

FRACTURE MECHANICS
STRESS INTENSITY FACTOR MEASUREMENTS IN COMPOSITE
sandwich structures
p0113 H82-17535

Introduction to the principles of fracture mechanics
p0273 H82-25550

Fracture mechanics technology applied to
individual aircraft tracking --- durability and
structural life estimates
p0284 H82-26637

A multidimensional-crack-growth prediction
methodology for flaws originating at fastener
holes
p0327 A82-28932

A fatigue crack growth theory based on strain
energy density factor
p0552 A82-43742

Fracture mechanics based modelling of the
corrosion fatigue process
p0210 H82-17344

Practical applications of fracture mechanics
[AGARD-AD-297] p0269 H82-19571

Fracture and fatigue characterization of aircraft
structural materials under biaxial loading
[AD-1109054] p0269 H82-19587

Engine component retirement for cause
p0345 H82-22177

OT-10A nose gear fork damage analysis
[AD-1111492] p0407 H82-25284

Fracture mechanics criteria for turbine engine hot
section components
[NASA-CH-167896] p0409 H82-25257

FRACTURE RESISTANCE
U FRACTURE STRENGTH

FRACTURE STRENGTH
The application of improved aluminium alloys and
steels in aircraft structures
p0004 H82-10305
Subject Index

Improvement of the first-ply-failure strength in laminates by using softening strips p0104 AB2-16174
Effects of elastomeric additives on the mechanical properties of epoxy resins and composite systems p0113 AB2-17538
The effects of absorbed moisture upon the physical properties of stretched acrylic materials p0226 AB2-24320
Application of damage tolerance technology to type certification [AIAA PAPER 81-01062] p0231 AB2-24388
Fracture control in ballistic-damaged graphite/epoxy wing structure p0284 AB2-26639
Engineering property comparisons of 7050-T7651, 7010-T651 and 7010-T73651 aluminum alloy plate -- for aircraft construction [NLB-NP-00947-U] p0357 WB2-22360
Carburized high temperature steels [AD-A116559] p0595 WB2-32467
Fracture Toughness u Fracture Strength u Fracture (Materials)
A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport [AIAA 02-0760] p0336 AB2-30119
Fatigue
Damage from engine debris projectiles p0202 WB2-17165
Damage from engine debris projectiles p0202 WB2-17165
Frames
Airframes
Undercarriages Thermal expansion accommodation in a jet engine frame p0017 AB2-11999
Fracture
Helicopter development in France p0208 WB2-17216
Fragility Region u Far Fields
FMS Flights Test Apparatus Direct free-flight analysis of aircraft dynamics at high angles of attack p0081 AB2-15596
A laser-interferometer method for determining the forces on a freely-flying model in a shock-tunnel p0550 AB2-43311
Design of dynamically-scaled, asymmetrical wind tunnel models [AIAA-78-7818] p0356 WB2-22285
Free Flow Multiple-scale turbulence modeling of free turbulent flows [AIAA PAPER 81-12-P2-20] p0012 AB2-10938
Static pressure in the slipstream of a propeller p0225 AB2-24023
Transonic flow past thin wings p0274 AB2-25995
An experimental study at free-stream Mach 5 of the aerodynamic heating of the upper surface of plane wings of various planform p0388 AB2-34149
Aerodynamic behavior of a slender slot in a wind tunnel wall p0481 AB2-38281
Free Jets
The German-Dutch wind tunnel as aeracoustic experimental installation p0110 AB2-17136
Model based study of various configurations of jet crossing a cavity -- application to the CEPA 19 wind tunnel of CEPR [AIAA-78-7818] p0012 AB2-10938
Acoustic emission from free jets -- superacoustic jets p0359 WB2-22962
Fluid dynamics of jets with applications to V/STOL [AGARD-CP-580] p0360 WB2-23150
Flowfield and noise sources of jet impingement of flags and ground surface p0361 WB2-23163
Free Oscillations u Free Vibration u Free System Effects u Free Flow
Free Vibration Aerodynamic characteristics of a misaligned bladed-disc assembly [ASME PAPER 82-GT-48] p0422 AB2-35306
Freeboard Air-freon integrated environmental conditioning system for trainer subsonic aircraft [ASME PAPER 81-EHA5-33] p0012 AB2-10920
Frequencies
NT Broadband NT C Band NT Carrier Frequencies NT Extremely High Frequencies NT High Frequencies NT Low Frequency Bands NT Resonant Frequencies NT Supersonic Frequencies NT Ultrahigh Frequencies NT Very High Frequencies NT Very Low Frequencies Effects of filter response on analyses of aircraft noise data [AD-A116559] p0602 WB2-33167
Frequency Bands u Frequencies
Frequency Converters NT Frequency Synthesizers
Frequency Modulation NT Frequency Shift Exciting B.F. calibrators for Doppler radars p0150 AB2-18917
Frequency Ranges NT Radio Range NT Frequency Response
The use of frequency methods in rotocraft system identification [AIAA PAPER 81-2386] p0064 AB2-14392
Optimization in multivariable design p0546 AB2-42565
Frequency Shift Exciting A single-frequency multitransmitter telemetry technique p0434 AB2-36281
Frequency Stability 60 KVA AFP permanent magnet VSCF starter generator system - Generator system performance characteristics p0016 AB2-11721
Advanced generating system technology p0230 AB2-24380
The effect of critical design parameters on the selection of a VSCF system p0230 AB2-24381
Package the VSCF system for an aircraft engine environment p0230 AB2-24383
Cascade converter of dc voltage to ac voltage of higher frequency with voltage and frequency stabilization devices -- aircraft electric equipment p0326 AB2-28875
Frequency Standards Global positioning system timing receivers in the DOD p0326 AB2-28875
Frequency Synthesizers High speed microwave phase-locked loops p0666 AB2-14696
 Fresnel Lenses Phoenix airport solar photovoltaic concentrator project p0577 AB2-04950
Descent-rate cues for carrier landings: Effects of display gain, display noise and aircraft type [AIAA-81-40001] p0264 WB2-19206
Fretting Occurrence of fretting fatigue failures in practice p0325 AB2-28543

1-223
INVESTIGATION OF AIR TRANSPORTATION TECHNOLOGY AT PRINCETON UNIVERSITY, 1981

PASSENGER-PROP AIRCRAFT FUEL ECONOMY

EFFECT ON FUEL EFFICIENCY OF PARAMETER VARIATIONS IN THE COST FUNCTION FOR MULTIVARIABLE CONTROL OF A TURBOFAN ENGINE

HIGH PRESSURE TURBINE ACTIVE CLEARANCE CONTROL

AERODYNAMICS AND ACTIVE CONTROLS TECHNOLOGY CONCEPTS DEVELOPMENT ON A DERIVATIVE B-747

AIRCRAFT ENERGY CONSERVATION DURING AIRPORT GROUND OPERATIONS

IMPACT OF ADVANCED PROPELLER TECHNOLOGY ON AIRCRAFT PERFORMANCE CHARACTERISTICS OF SEVERAL HELICOPTER AIRCRAFT

EXHAUST EMISSIONS REDUCTION FOR INTERCOOLED COMBUSTION ENGINE AIRCRAFT

AIRCRAFT THRUST/POWER MANAGEMENT SYSTEMS TO REDUCE ENGINE MAINTENANCE COSTS AND IMPROVE READINESS

FUEL CONTAMINATION

HANDLING PROBLEMS ASSOCIATED WITH JET AIRCRAFT FUELS

THE USE OF DOPPLER SPECTROSCOPY TO STUDY THE CHARACTERISTICS OF THE POLYDISPERSED CHARACTERISTICS OF EMISSION WATER AND SOLID MICROSPOROUS IN AVIATION FUELS

DETERMINATION OF SELECTED DISTILLATE BLENDING SOLVENTS IN SIMPLE AND COMPLEX AIRCRAFT FUEL SATURATES VIA GLASS CAPILLARY GAS CHROMATOGRAPHY

FUEL CONTROL

A FUEL CONTROL SYSTEM DESIGNERS APPROACH TO GAS TURBINE ENGINE COMPUTER MODEL VALIDATION

ADAPTIVE FUEL CONTROL FEASIBILITY INVESTIGATION FOR HELICOPTER APPLICATIONS

ELECTRONIC CONTROL FOR SMALL ENGINES

ADAPTIVE FUEL CONTROL FEASIBILITY INVESTIGATION

DUALCHANNEL FUEL CONTROL PROGRAM, PHASE 2

FUEL COMBUSTION

A PROTECTIVE ADDITIVE FOR JET FUELS

IMPROVING THE ACCURACY OF THE ESTIMATES OF SURFACTANT CONTENT IN JET FUELS

COMMERCIAL AIRCRAFT AIRFRAME FUEL SYSTEMS SURVEYS

FUEL FLOW

RADIUS COST PERFORMANCE MONITORING OF TURBOFAN ENGINES

ATOMIZATION QUALITY OF TWIN FLUID ATOMIZERS FOR GAS TURBINES

THE SCHRADT FUEL INJECTOR: AN INITIAL PERFORMANCE EVALUATION WITHOUT BURNING

FUEL GAGES

ADVANCED FUEL FLOWMETER FOR FUTURE NAVAL AIRCRAFT

FUEL INJECTION

INFLUENCE OF AIRPLANE ATOMIZER DESIGN FEATURES ON MEAN DROP SIZE

EVALUATION OF FUEL INJECTION CONFIGURATIONS TO CONTROL CARBON AND Soot FORMATION IN SMALL GT COMBUSTORS

FUEL SYSTEMS

HT AIRCRAFT FUEL SYSTEMS

MAINTENANCE PROBLEMS ASSOCIATED WITH THE OPERATION OF THE J-402/PEACOCK ENGINE IN THE A-7A/ARROW AIRCRAFT

AIRCRAFT FUEL INJECTION

EVALUATION OF FUEL INJECTION CONFIGURATIONS TO CONTROL CARBON AND Soot FORMATION IN SMALL GT COMBUSTORS
GAS ABALISIS
GAS ABALISIS
CAS 6E8EBATOB EH6IBES
GAS BEABIIGS
6ABHEHTS
GAS COOHIG
FLO!
GAS
GAS DTHAHICS
HT AEBODIHAHICS
-- loss models for the stator and rotor of a mixed
vertical axis compressor cascade
Characteristics of a side dump gas generator ramjet
[AILA PAPER 82-1250] p0114 A82-12107
Comparison of HP turbine "deep blade design" effects in turbofan engine gas generators with
different bearing structure configurations
application of numerical modeling to gas turbine combustor development problems...-82-12118
Valuation studies of turbulence and combustion models for aircraft gas turbine combustors...-82-12267
Commercial ESS considerations for small gas turbine engines --- automated engine monitoring systems...-82-12449
Further application and development of an engine usage life monitoring system for military services...-82-12450
Superclean superalloy powders by the rotating electrode process...-82-12496
Lineup of the IM-series aircraft-derivative gas turbines...-82-12560
Creep and aero gas turbine design...-82-12597
Study of the load-carrying capacity of aviation gas-turbine engine impellers under low-cycle loading at normal and high temperatures...-82-15482
Experimental investigation of total pressure loss and airflow distribution for gas turbine combustors...-82-15606
In situ composites for jet propulsion and stationary gas turbine applications...-82-15924
A method for predicting the lifetime of gas turbine blades...-82-16692
Islanding and service induced cracks in a mature population of gas turbine engine bearings...-82-18444
Damage of turbine blades due to interaction with fuel renamination products...-82-18479
Fluidics in aircraft engine controls...-82-18961
A fuel control system designer's approach to gas turbine engine computer model validation...-82-19253
A CAD/CAM graphics system with relative datums and tolerances...-82-19333
Application of structural optimization techniques to reduce the external vibrations of a gas-turbine engine...-82-19351
The history of aviation turbine lubricants...-82-19624
The control of aircraft gas turbine for fuel economy...-82-20516
Dispersion and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine engine disk alloy...-82-21636
Lineup of the IM-series aircraft-derivative gas turbines...-82-22896
Reliable power --- Rolls-Royce aircraft engine designs...-82-24007
APWAF turbine engine controls research and development - Present and future...-82-25050
Requirements on modern mathematical models of gas turbine engines...-82-26486
Application of combined balancing methods to flexible rotors of aviation gas-turbine engines...-82-26491
Sub energetics of compressor blade tip seals...-82-27078
Strength of the turbine components of a gas-turbine engine under complex loading and associated problems...-82-27526
Analysis of the temperature field of a baffle-cooled gas-turbine-engine blade under conjugated boundary conditions...-82-28015
The effect of temperature-time factors on metal damage and endurance characteristics of...-82-28019
Precision casting for gas turbine engines...-82-28313
The gas turbine engine...-82-28590
Ceramic component development for limited-life propulsion engine...-82-28972
Blade loss transient dynamic analysis of turbomachinery...-82-30697
Experimental study of the effects of secondary air on the emissions and stability of a lean premixed combustor...-82-30992
Advancements in real-time engine simulation technology --- of digital electronic aircraft engine controls...-82-30995
NASA/Generic Electric broad-specification fuels combustion technology program - Phase I results and status...-82-35000
Evaluation of fuel injection configurations to control carbon and soot formation in small GT combustors...-82-35041
The P404 development program - a new approach...-82-35045
Icing conditions on sea level gas turbine engine test stands...-82-35078
Thermal decomposition of aviation fuel...-82-35292
Plain-jet airblast atomization of alternative liquid petroleum fuels under high ambient air pressure conditions...-82-35293
Fuel macroemulsions for jet engine smoke reduction...-82-35294
Acoustic control of dilution-air mixing in a gas turbine combustor...-82-35295
Small engine inlet air particle separator technology...-82-35315
The effect of coolant flow on the efficiency of a transonic HP turbine profile suitable for a small engine...-82-35333
Carbon formation by the pyrolysis of gas turbine fuels in preflare regions of gas turbine combustors...-82-35333
Two-phase transpiration cooling...-82-35333
A two-dimensional boundary-layer program for turbine airfoil heat transfer calculation...-82-35333
A-230
Coatings in the aero gas turbine -- sprayed coatings

[PHR-90049] p0318 882-21204

Processes development and evaluation of gas turbine engine components in 111 Sc 2125 -- titanium alloy

[PHR-90050] p0318 882-21205

The mechanical testing of compressors and turbines for aircraft gas turbine engines -- Rolls Royce engines

[PHR-90070] p0319 882-21111

Telemetry in aero engine development -- from operating engines

[PHR-90055] p0321 882-21247

Maintenance in Service of High Temperature Parts

[AGAB-CP-317] p0345 882-22172

Military maintenance policies and procedures for high-temperature parts. Will they be adequate?

[PHR-90073] p0355 882-22270

Engine depot maintenance repair technology

[PHR-90074] p0345 882-22174

Maintenance problems in gas turbine components at the Royal Naval Aircraft Yard, Fleetlands -- helicopter and marine gas turbines

[PHR-90075] p0345 882-22215

Maintenance experience with civil aero engines

[PHR-90076] p0345 882-22216

Engine component retirement for cause

[PHR-90077] p0345 882-22217

Defects and their effect on the behavior of gas turbine discs

[PHR-90078] p0346 882-22218

The influence of protective treatment on the mechanical properties of superalloy parts

[PHR-90079] p0346 882-22219

Repair and regeneration of turbine blades, vane and discs

[PHR-90080] p0346 882-22218

Investigation of soot and carbon formation in small gas turbine combustors


BB211 powerplant deterioration: review of current situation and lessons learned

[PHR-90073] p0355 882-22270

The contribution of thermal barriers to the life and performance of gas turbine components

[PHR-90075] p0355 882-22271

Reliable power -- BB211 aircraft engines

[PHR-90077] p0355 882-22278

Directional solidification: Project B2 -- of gas turbine rotor blade alloys

[PHR-90088] p0356 882-22279

A helicopter handling-quality study of the effects of engine response characteristics, height-control dynamics, and excess power on map-of-the-earth operations

[PHR-90080] p0365 882-23210

Analysis of high load dampers


Repair study of syntactic and alternative fuel usage in Army aircraft propulsion systems

[AD-A111046] p0390 882-24355

Evaluation of inelastic constitutive models for nonlinear structural analysis -- for aircraft turbine engines

[PHR-90090] p0398 882-24502

Analysis of transient data from aircraft gas turbine engines using aids

[PHR-90095] p0403 882-25189

Cost/benefit studies of advanced materials

[PHR-90096] p0403 882-25189

Low NOx heavy fuel combustor concept program

[PHR-90097] p0408 882-25254

Transient simulation of gas turbines including the effects of heat capacity of the solid parts

[ISDN-951-752-466-1] p0453 882-26296

Life and Utilization Criteria Identification In Design (LUCID), Volume 1

[AD-A111039] p0453 882-26309

Life and Utilization Criteria Identification In Design (LUCID), Volume 2

[AD-A111040] p0455 882-26310

Depot support of gas turbine engines

[AD-A07746] p0462 882-27217

Rotor fragment protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in U.S. commercial aviation during 1978

[PHR-90099] p0473 882-27316

Mechanical property characterization and modeling of structural materials -- for airframes and aircraft gas turbine engines

[AD-A111041] p0478 882-27316

Ceramic applications in turbine engines


A method for defining inlet distortion screening for aircraft gas turbine engine tests using an interactive computer program

[AD-A116504] p0569 882-31325

Active clearance control system for a turbomachine

[NASA-CASE-129-12039-1] p0599 882-32366

Performance of SBC II fuels in gas-turbine combustors. Alternative-fuels-utilization program

[AD-D-30471] p0599 882-32518

Engine dynamic analysis with general nonlinear finite element codes. Part 2: Bearing element implementation overall numerical characteristics and benchmarking

[NASA-CR-167946] p0609 882-33390

Energy efficient engine: Turbine transition duct design technology report


GAS TURBINES

Fuel property effects on radiation intensities in a gas turbine combustor

[PHR-90099] p0616 882-19566

Investigation of heat transfer in the vicinity of the leading and trailing edges of a cooled nozzle blade of a low-consuming gas turbine

[PHR-90099] p0295 882-28018

Air cooling of gas turbine blades

[AD-A101670] p0390 882-34700

A comprehensive method for preliminary design optimization of axial gas turbine stator

[AIAA-PAPER-82-1264] p0419 882-35091

Atomization quality of twin fluid atomizers for gas turbines

[AIAA-PAPER-82-GT-61] p0422 882-35314

The use of performance-monitoring to prevent compressor and turbine blade failure

[AIAA-PAPER-82-GT-66] p0422 882-35316

Gas turbine airflow control for optimum heat recovery

[AIAA-PAPER-82-GT-83] p0423 882-35329

Development of hybrid gas turbine bucket technology

[AIAA-PAPER-82-GT-94] p0424 882-35337

A critical appraisal of some current incidence loss models for the stator and rotor of a mixed flow gas turbine

[AIAA-PAPER-82-GT-120] p0425 882-35350

Accuracy expectations for gas turbine and centrifugal compressor performance testing

[AIAA-PAPER-82-GT-128] p0425 882-35350

Oxidation-resistant materials for hot-gas turbine and jet engines. 2

[PHR-90099] p0543 882-41725

Gas turbine ceramic-coated-vane concept with connection-cooled porous metal core

[NASA-TP-1942] p0134 882-14907

Linear and nonlinear analysis of vortex whistler: Another blade hustler

[PHR-90099] p0144 882-15067

Brattle materials design, high temperature gas turbine

[AD-A106670] p0191 882-16065

Dual channel fuel control program, phase 2

[AD-A109715] p0305 882-20165

Basic technology of squeeze-film dampers for rotor dynamics control

[AD-A110842] p0369 882-23250

Evaluation of cast titanium alloy compressor components, volume 1

[AD-A111431] p0396 882-24204

Performance of multiple, angled nozzles with short mixing stack eductor systems

[AD-A109817] p0454 882-26302

Heat transfer in turbines

[AD-A111506] p0455 882-26307

Survey and update of F-14A mission profiles for TF30 engine usage

[AD-A116831] p0603 882-33337

Numerical stability analysis of a compressor model

[AD-A116878] p0610 882-33394

GAS WASHING

BY DRAINING

GAS-LIQUID INTERACTIONS

BY AIR-WATER INTERACTIONS
GENERAL AVIATION AIRCRAFT CONTDO

NASA research in aircraft propulsion
[AIAA PAPER 82-04-1777] p0426 A82-00-32589
A single-frequency multitransmitter telemetry technique
p0434 A82-00-36281

Analysis of general aviation accidents using ATC
telecommunications [AIAA PAPER 82-1310] p0487 A82-39091
Parameter estimation applied to general aviation
telemetry data [AIAA PAPER 82-1313] p0487 A82-39094

Analysis of an airplane windshield anti-icing system
[AIAA PAPER 82-1337] p0489 A82-39114

Propulsion opportunities for future commerter
aircraft [NASA PAPER 82-1049] p0497 A82-40418

Sport aircraft --- human book
p0498 A82-40483

Design and flight testing of a digital optical
control general aviation autopilot
p0507 A82-40906

Dual wing, swept forward swept rearward wing, and
single wing design optimization for high
performance business airplanes
p0508 A82-40931

Assessment of advanced technologies for high
performance single-engine business airplanes
p0508 A82-40932

Operation VIOP - development of a composite
material wing
p0509 A82-40934

Wind-tunnel investigation of a full-scale
canard-configured general aviation aircraft
p0517 A82-41024

Visual scene simulation concerning the landing of
sporting aircraft in connection with investigations regarding the control and
learning behavior of the pilot --- German thesis
p0543 A82-41796

Analysis of flight data in the frequency domain
p0543 A82-41797

Technology for tomorrow's business airplane
p0551 A82-43577

Piston engines for general aviation -- Is the
revolution really under way
p0551 A82-43578

NASA studies business aircraft avionics
p0552 A82-43659

Messonscale convective systems and general aviation
p0560 A82-45832

Post analysis of aircraft accident environments
p0560 A82-45835

General aviation aircraft antennas for the global
positioning system [NASA-TM-83212] p0401 A82-11339

Design study report for General Aviation Loarac-C
receiver [AD-A104921] p0087 A82-12062

NASA research in aircraft propulsion
[AIAA PAPER 82-0277] p1000 A82-13146

Automated Pilot Advisory System
[AIAA PAPER 82-0277] p1000 A82-13146

Airborne antenna pattern calculations
[AIAA PAPER 82-16505] p0414 A82-15227

Summary of theoretical considerations and wind
_tunnel tests of an aerodynamic spoiler for stall
proofing a general aviation airplane
[NASA-CR-65100] p0519 A82-41447

Spin tests of a single-engine, high-wing light
airplane
[NASA-TM-82197] p1019 A82-16046

Aircraft icing avoidance and protection
[PB82-108835] p2000 A82-17139

Study of cabin noise control for twin engine
general aviation aircraft
[NASA-CR-65033] p2050 A82-19995

Bibliography of NASA published reports on general
aviation, 1975 to 1981
[NASA-TM-83367] p2050 A82-19132

A design study of the Learjet --- 110hp, single,
twin-engined aircraft
[PB82-1262] p2065 A82-19215

A concept for a fuel efficient flight planning aid
for general aviation
[NASA-CR-3531] p2066 A82-19217

An experimental study of the effect of tail
configuration on the spinning characteristics of
general aviation aircraft --- static wind tunnel
force measurements
[PB82-104510] p1051 A82-30525

SUBJECT INDEX

Simulator study of a pictorial display for general
aviation instrument flight
[NASA-TP-1961] p0306 A82-20180

NASA/Lewis Research Center Icing Research Program
p0311 A82-21140

Maintenance experience with civil aero engines
p0345 A82-22176

Effect of nacelles on aerodynamic characteristics
of an executive-jet model with nacelles, partial-chord, laminar-flow-control wing glove
[NASA-TP-83271] p0349 A82-22217

Analytical and flight evaluation of a small,
fixed-wing airplane equipped with flapped plate
spoilers
[NASA-CR-166247] p0352 A82-22243

Revolution in airplane construction? Grob G110:
The first modern fiber glass composite airplane shortly before its maiden flight
[NASA-TP-76705] p0352 A82-22246

Solid state crash survivable flight data recorders
for mishap investigation
[NASA-TP-78380] p0401 A82-25173

Investigation of air transportion technology at
Princeton University, 1981
p0446 A82-26212

Flying qualities criteria for GA single pilot IFB operations
p0446 A82-26213

Input/output models for general aviation
p0446 A82-26215

Effects of wing-leading-edge modifications on a
full-scale, low-wing general aviation airplane: Wind-tunnel investigation of
high-angle-of-attack aerodynamic characteristics --- conducted in Langley 30- by 60-foot tunnel
[NASA-TP-2011] p0464 A82-26217

Flight-test verification of a pictorial display for
general aviation instrument approach
[NASA-TP-83305] p0464 A82-26218

Propulsion opportunities for future commerter
aircraft [NASA-TP-82915] p0464 A82-26218

Briefs of accidents involving corporate/executive
aircraft, U.S. general aviation, 1979
[PB82-138967] p0464 A82-27245

Briefs of accidents involving missing and missing
lat recovered aircraft, U.S. general aviation, 1979
[PB82-138959] p0468 A82-27246

Briefs of accidents involving rotorcraft, U.S.
general aviation, 1979
[PB82-138926] p0465 A82-27247

Briefs of accidents involving turbine powered
aircraft, U.S. general aviation, 1979
[PB82-138916] p0465 A82-27249

Briefs of accidents involving midair collisions:
U.S. general aviation, 1979
[PB82-138900] p0465 A82-27251

Annual review of aircraft accident data: U.S. aar
carrier operations, 1979
[PB82-134339] p0465 A82-27253

Briefs of accidents involving fixed-wing
multi-engine aircraft, U.S. General aviation, 1979
[PB82-139007] p0465 A82-27254

Briefs of accidents involving amateur/home built
airplane, U.S. general aviation, 1979
[PB82-139075] p0466 A82-27257

A Loran-C prototype navigation receiver for
general aviation
[NASA-CR-169138] p0466 A82-27259

Advanced microstrip antenna developments. Volume
2: Microstrip GPS antennas for general aviation
aircraft [AD-A113620] p0466 A82-27259
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>GLASS FIBER REINFORCED PLASTICS</th>
</tr>
</thead>
</table>
| Structures and Dynamics Division research and  
  technology plans, FY 1982 | | |
| Results from tests of three prototype general  
  aviation seats | | p0561.882-30566 |
| [NASA-TM-85509] | | |
| Cranworth airplane design concepts: Fabrication  
  and testing | | p0613.882-33733 |
| [NASA-CP-36033] | | |
| **GENERAL DYNAMICS AIRCRAFT** | | |
| NT CANADIAN AIRCRAFT | | p0613.882-33735 |
| NT F-106 AIRCRAFT | | |
| NT F-111 AIRCRAFT | | |
| **GENERAL DYNAMICS MILITARY AIRCRAFT** | | |
| U MILITARY AIRCRAFT | | |
| GEOASTROPHICS | | |
| U GEOPHYSICS | | |
| GEODESIC LINES | | |}

*This is a partial list of subjects indexed in the document.*

<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>GLASS FIBER REINFORCED PLASTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near field analysis of airborne antennas</td>
<td></td>
</tr>
<tr>
<td><strong>GEODETIC COORDINATES</strong></td>
<td></td>
</tr>
</tbody>
</table>
| Transformation relations for singularity avoidance  
  in three-dimensional trajectory optimization | | p0378.882-32137 |
| An unbiased analysis of the Doppler coordinate  
  system | | |
| [AD-A110510] | | p0450.882-26269 |
| **GEODETIC SATELLITES** | | |
| A global atlas of GEOS-3 significant wavelength  
  data and comparison of the data with national  
  buoy data | | |}

*Continued on next page.*
GLASS FIBERS

- Fatigue behavior of selected non-woven fiber composites for helicopter rotor blades
- A study of the suitability of all fiberglass C-F-11A aircraft for fuel efficient general aviation flight research
- CS-47 fiberglass rotor blade design and fabrication
- Design and production of fiberglass helicopter rotor blades
- Composite fasteners - a compatible joining technique for fibrous composites in structural design --- aircraft construction materials
- Composite materials --- with emphasis for aircraft gas turbine parts
- Effects of moisture on the mechanical properties of glass/epoxy composites
- Mechanical properties of a fiberglass prepreg system at cryogenic and other temperatures
- Use of CGBF in transport --- Carbon and Glass Hybrid Reinforced Plastics
- A significant role for composites in energy-efficient aircraft
- 3 1D on composite rotor blades at Agusta
- CFC drive shaft and GFC coupling for the tail Concorde glazings - 5 years of service
- Operational experience with the fiberglass rotor blade repair program
- Adaptation of pultrusion to the manufacture of helicopter components
- Determination of load spectra and their application for keeping the operational life proof of sporting airplanes
- Revolution in airplane construction? Grob G110: The new fiber glass composition airplane shortly before its maiden flight
- Development of materials and manufacturing technology over the next 20 years: Composite materials
- CS-46 fiberglass rotor blade repair program
- Operational experience with the fiberglass rotor blade

GLASS FIBERS

GLADEY COEFFICIENT

U AEROHYDRAULIC FORCES
U BACH NUMBER

GLASES

B.A.C. One-Eleven flight deck glazing product improvement
Concorde glazings - 5 years of each 2 service
Transparent polyolefin film error
[AD-A107562]

GLIDE ANGLES

U GLIDE PATHS

GLIDE LANDING

TRACALS evaluation report. Special report: A procedure for RIT position improvement using linear regression analysis of glide slope structure
[AD-A115926]

GLIDE PATHS

Constant L/D glide trajectories
[AIAA PAPER 82-0362]
A new end-fire ILS glide slope
[AD-A115926]
Development of a digital integrated automatic landing system /DIALS/ for steep approach and landing
[AD-A115926]
Fracture control in ballistic-damaged graphite/epoxy wing structure p0284 A82-26639

Composite wing substructure technology on the MV-88 advanced aircraft p0287 A82-27128

Design concepts for composite fuselage structures p0288 A82-27144

Advanced composites integral structures meet the challenge of future aircraft systems p0288 A82-27133

Continuous filament advanced composite isogrid — A promising structural concept p0288 A82-27138

A crashworthiness test for composite fuselage structure p0288 A82-27139

Impact resistance of graphite and hybrid configurations p0288 A82-27141

Effects of lightning and nuclear electromagnetic pulse on an advanced composites aircraft p0288 A82-27144

Preliminary design of an advanced composite rotor hub for the UH-60A Black Hawk p0289 A82-27154

Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing p0289 A82-27155

Durability evaluation of highly stressed wing box structure p0289 A82-27163

Growth of four flaw types in graphite/epoxy composites due to fully reversed fatigue p0289 A82-27167

Flight service evaluation of advanced structures p0291 A82-27402

A new resin for field repair p0291 A82-27412

Characterization of composition variations in structural adhesive p0292 A82-27415

Composite bonds improve thermal integrity p0335 A82-30004

Effects of 50,000 hours of thermal aging on graphite/epoxy and graphite/polyimide composites [AIAA 82-0657] p0335 A82-30007

737 graphite-epoxy horizontal stabilizer certification [AIAA 82-0745] p0336 A82-30109

On the characterization of damages in graphite-epoxy composites [AIAA 82-0757] p0336 A82-30117

Aeroelastic flutter and divergence of stiffness coupled, graphite/epoxy, cantilevered plates [AIAA 82-0722] p0340 A82-30172

A giant step toward composite helicopters p0341 A82-30294

System study of application of composite materials for future transport aircraft [AIAA PAPER 82-0812] p0376 A82-31895

Fabrication and test of integrally stiffened graphite/epoxy components p0435 A82-38701

Application and testing of metallic coatings on graphite/epoxy composites p0435 A82-38704

Evaluation of sensitivity of ultrasonic detection of disbonds in graphite/epoxy to metal joints p0436 A82-37080

Developments on graphite/epoxy T-2 nose landing gear door p0495 A82-39893

Development of the advanced composite ground spoiler for C-1 media transport aircraft p0495 A82-39895

Development status of a composite vertical stabilizer for a jet trainer p0495 A82-39895

Non-honeycomb F-16 horizontal stabilizer structural design p0509 A82-40936

Design and fabrication of cored composite hat-stiffened panels p0513 A82-40978

Application of composite materials and new design concepts for future transport aircraft p0515 A82-40994

In-service inspection methods for graphite-epoxy structures on commercial transport aircraft [NASA-CR-165746] p0089 A82-12192

A study of the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials [NASA-CR-165763] p0256 A82-18327

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept [NASA-CR-168745] p0322 A82-21999

Concept studies of an advanced composite helicopter fuselage [AIAA 82-210-106] p0353 A82-22257

The 737 graphite composite flight spoiler flight service evaluation [NASA-CR-165826] p0356 A82-22314

Standard tests for toughened resin composites — for aircraft structures [NASA-RP-1092] p0397 A82-24301

Environmental exposure effects on composite materials for commercial aircraft [NASA-CR-165981] p0594 A82-32421

GRAPHITE-POLYIMIDE COMPOSITES

Effects of 50,000 hours of thermal aging on graphite/epoxy graphite/polyimide composites [AIAA 82-0657] p0335 A82-30007

High temperature, short term tensile strength of C6000/PB-15 graphite polyimide [AIAA 82-0711] p0337 A82-30125

Geometrical aspects of the tribological properties of graphite fiber reinforced polyimide composites [AIAA PAPER 82-AM-2-1] p0431 A82-37855


Develop, demonstrate, and verify large area composite structural bonding with polyimide adhesives — adhesively bonding graphite-polyimide structures [NASA-CR-165839] p0459 A82-26665

GRAPHS (CHARTS)

Airborne gamma-ray spectrometer and magnetometer survey, Jilkdpuk River quadrangle, Alaska, volume 2 [DE82-004150] p0399 A82-24620

Airborne gamma-ray spectrometer and magnetometer survey, Jamestown quadrangle, North Dakota, volume 1 [DE82-004150] p0399 A82-24629

Airborne gamma-ray spectrometer and magnetometer survey, Jamestown quadrangle, North Dakota, volume 2 [DE82-004169] p0399 A82-24630

GRAVITATIONAL

MT GRAVITY ANOMALIES

MT REDUCED GRAVITY

GRAVITATIONAL EFFECTS

Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling [NASA-CR-165763] p0256 A82-27272

The Earth’s gravity field to degree and order 180 using SEASAT altimeter data, terrestrial gravity data and other data [NASA-CR-165981] p0478 A82-27900

GRAVITATIONAL POTENTIAL

GRAVITY ANOMALIES

Gravity induced position errors in airborne inertial navigation [AD-A113098] p0399 A82-24620

Gravity induced position errors in airborne inertial navigation [AD-A113823] p0467 A82-27272

The Earth’s gravity field to degree and order 180 using SEASAT altimeter data, terrestrial gravity data and other data [AD-A113823] p0478 A82-27900

GREAT BRITAIN

UNITED KINGDOM

S A Schwart-Cristoffel method for generating A-238
internal flow grids  

GROUND EFFECT  

Influence of casing treatment on the operating range of axial compressors  
[AIAA PAPER 82-07-103]  

GROUND BASE CONTROL  

MT AIR TRAFFIC CONTROL  

MT AUTOMATED EN ROUTE ATC  

MT RADAR APPROACH CONTROL  

Highlight onboard flight computer system architecture and qualification  
[AIAA 81-2107]  

GROUND EFFECT  

A/B92-55082  

AB/TPC-25 and AB/GPS-22 precision approach radars  

Ground movement control and guidance - Cat. 3  

operations experience in air inter  

Stereoscopic projection in the National Airspace System  

Flight control systems for aerial targets  

The design of a BPV ground station simulator  

Helicopter simulation technology: An overview  

Research Center perspective  

A ground-simulator investigation of helicopter longitudinal flying qualities for instrument approach  
[NASA-TR-8452]  

GROUND EFFECT  

Ground reflection effects in measuring propeller aircraft flyover noise  

Jet VSTOL wind tunnel simulation and groundplane effects  

Aerodynamic effects of shape, camber, pitch, and ground proximity on idealized ground-vehicle bodies  

A summary of jet-lag measurements at McDonald Douglas Research Laboratories  

Ground effect hover characteristics of a large-scale twin tilt-rotor V/STOL model  

[AIAA PAPER 81-266]  

Ground reflection effects in aircraft noise measurements  

Analysis of flight test measurements in ground effect  

The potential of large aircraft  

[AIAA PAPER 82-0606]  

Analysis of small-aspect-ratio lifting surfaces in ground effect  

An evaluation of vertical drag and ground effect using the ESA rotor balance system - Rotor Systems Research Aircraft  

Performance testing of a main rotor system for a utility helicopter at 1/4 scale  

The modeling and prediction of multiple jet VTOL aircraft flow fields in ground effect  

Ground reflection effects - model scale and test technique on jet-induced effects  

Jet effects on forces and moments of a VSTOL fighter type aircraft  

V/STOL aircraft and fluid dynamic  

Study of VTOL in ground-effect flow field including temperature effect  

Ground EFFECT (COMMUNICATIONS)  

Flight measurements of Area Navigation Systems performance using various combinations of ground aids and airborne sensors  

Experimental measurement of the low angle terrain scattering interference environment  

SUBJECT INDEX  

GROUND SUPPORT SYSTEMS  

Loran-C NAV in mountainous areas  

Terrain reflection effects on data reception from airborne vehicles  

GROUND EFFECT MACHINES  

Flight systems and fan performance of air cushion supported vehicles  
[AD-A117363]  

GROUND HANDLING  

C-5A unsurfaced taxi and off-load demonstrations  

IATA's Unit Terminal Concept  

Study of ground handling characteristics of a maritime patrol aircraft  

Preliminary study of ground handling characteristics of Buoyant Quad Rotor (BQR) vehicles  

GROUND SPEED  

Magnetice anomalies as a reference for ground-speed and map-matching navigation  

The use of groundspeed, in a wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed  
[AD-A104756]  

A digital simulation program describing the motion of an aircraft undergoing engine failure during its takeoff ground roll  
[AD-A108420]  

Ground speed measurement from DME/VHF omni range navigation (FOR) data  

GROUND STATIONS  

MT ENHANCED TERMINALS  

Data communications within the Air Navigation Services System  

Analysis of Loran-C system reliability for civil aviation  

Flight control systems for aerial targets  

The design of a BPV ground station simulator  

Data processing at the Global Positioning System master control station  
[AD-A110553]  

Standard engineering installation package. Airborne flight test system (APTS)  

Airborne Flight Test System (AFTS)  

Ground support equipment for digital flight evaluation of a radar-altimeter-based navigation (TOB) data  

GROUND SUPPORT EQUIPMENT  

Now life for an 'old' body - Vienna's master plan for revitalization  

Telemetry Computer System at Wallops Flight Center  

The ILS in Category III operations - ground-based support for French air routes  
[SEE PAPER 811761]  

Control of the operations of a 'flight complex' - Russian on ground installations to aid air and space navigation  

Analysis of Built-In-Post (BIT) false alarms conditions  

Further development of the test concept of the ALPHA JET engine LABZAC 04  

Interception and display system: A ground support equipment for digital flight systems  

Frequency sharing between passive sensors and aeronautical radionavigation systems employing ground transponders in the band 4.2 - 4.4 GHz  

Automated Low-cost Weather Observation System (ALWOS)  
[AD-A117474]  

GROUND SUPPORT SYSTEMS  

Highlights of a design concept for a close ground
Gust response of commercial jet aircraft including effects of autopilot operation

The determination of gust loads on nonlinear aircraft using a power spectral density approach

Prediction of fatigue crack growth rates under variable loading using a simple crack closure model

Gust front structure observed by Doppler radar

The Joint Airport Weather Studies project --- investigation of convective microbursts

Rotor state estimation for rotorcraft

Gyroscopic and probabilistic approaches

Gust alleviation for general aviation aircraft

A gust damper for light passenger aircraft

Gust load alleviation on Airbus A 300

Design for active and passive flutter suppression and gust alleviation

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving riding quality in fighter aircraft

Control law design to meet constraints using SIMAC-synthesis package for active controls

Gust loads

Crack growth evaluation of a method to convert real-time loads history to a simplified engineering spectra --- for aircraft structural analysis

Digital active control system for load alleviation for the Lockheed L-1011

Numerical computation of unstable subsonic aerodynamic forces on wing-body-tail exposed to travelling gust

Sudden changes in wind velocity - Their effect on aircraft and means of reducing hazard. I

The effects of atmospheric turbulence on a quadrotor heavy lift airship

Aerodynamic theory for noncompact wing-gust interaction

Estimation methods for the determination of dynamic responses of elastic aircraft --- to random loads

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume I: Load alleviation/extended span development and flight tests

Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence report generation


Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls
Optimization of blade pitch angle for higher harmonic rotor control p015 82-37776

A method of characteristics solution for a finite oscillating supersonic cascade with thickness effects p015 82-15060

HARMONICS

AT HARMONIC EXCITATION

AT HARMONIC OSCILLATION

A new investigation of rotor harmonic noise by the use of small scale wind tunnel models [NASA-CH-166337] p0144 82-24050

HARNESS

'Little people' problems/MA-2 torso harness/ p0078 82-14958

A new safety harness for mobile aircraft p0077 82-14463

Disengagement of safety harness buckles - CT p0263 82-21999

Evaluation of a proposed modified F/FB-111 crew restraint system [AD-110186] p0313 82-21167

Comparative vertical impact testing of the F/FB-111 crew restraint system and a proposed modification [AD-113575] p0522 82-20857

Feasibility study of a 270V dc flat cable aircraft electrical power distribution system [AD-114026] p0522 82-20552

HARPOON MISSILE

Harpoon missile capture-carry dynamic environments on the A-6 aircraft p0583 82-47072

HARRIER AIRCRAFT

Commentary on facilities used in the development of a Sea Harrier all weather operational capability [AIAA PAPER 81-2407] p0056 82-13892

AV-88 technical update - Leading edge root extension development p0077 82-14940

Advanced cockpit for tactical aircraft p0016 82-16559

Maintenance problems associated with the operation of the P402/Pegasus engine in the AV-8A and Harrier aircraft [AIAA PAPER 81-2656] p0109 82-16195

AV-8B Harrier II p0109 82-21260

AV-8B/Harrier G.5 - Range, payload and VSTOL p0275 82-26044

Composite wing substructure technology on the AV-8B advanced aircraft p0277 82-27128

Preliminary design development AV-8B forward fuselage composite structure p0677 82-27129

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation [NASA-TP-62770] p0109 82-13144

Equipment vibration qualification for Harrier and Hawk aircraft p0345 82-22161

An oxygen enriched air system for the AV-8A Harrier [AD-A115554] p0464 82-27239

Reliability and maintainability improvement program for the AV-8A/TAV-8A Harrier head-up display set, development of the signal data converter, CT-3600/AVQ-30(Y), volume 3 p0591 82-32365

HAWKER SIDDELEY AIRCRAFT

AT HAWKER SIDDELEY AIRCRAFT

U.S. Marine Corps AV-8A maintenance experience [AIAA PAPER 81-2657] p0482 82-38446

HAZARDS

AT AIRCRAFT HAZARDS

AT FLIGHT HAZARDS

AT RADIATION HAZARDS

Investigation of the structural degradation and personal hazards resulting from helicopter composite structures exposed to fire and/or explosions [AD-A104757] p0686 82-12057

Study of air compressor hazards in underground and surface mines [PB82-105164] p0414 82-17597

HC-1 HELICOPTER

U CH-47 HELICOPTER A-202
HEAD-UP DISPLAYS

Applications of head-up displays in commercial transport aircraft
(AIAA 81-2150) p0650 A82-13506

The LASTHM wide-field-of-view raster Head-Up Display --- Low Altitude Navigation and Targeting Information for Flight
Head-up displays - The integrity of flight information
A simulator assessment of a wide field of view head-up display for presenting a FLIR sensor image during low level navigation and ground attack simulations
A new angular deviation measurement device for aircraft transparencies
Micro-heads-up display
Study and development of an integrated head-up display
Head-up displays

Definition of display/control requirements for assault transport night/adverse weather capability
Wide angle raster head-up display design and application to future single seat fighters

Design study for a low-distortion holographic HUD
Head-up display
Final engineering report for computer, weapon aiming CP-1044/A
Reliability and maintainability improvement program for the AF-BA/AFY-BA Harrier head-up display set, development of the signal data converter, CY-3600/AVU-30 (F), Volume 3
An operational evaluation of head-up displays for civil transport operations. NASA/FAA Phase 3

HEAT RESISTANT ALLOYS

Powder metallurgy superalloys - Aerospace materials for the 1980’s; Proceedings of the Conference, Zurich, Switzerland, November 18-20, 1980. Volume 1
Supercooled superalloy powders by the rotating electrode process
Superalloy turbine components - Which is the superior manufacturing process, as-HIP, HIP plus isoforge, or ‘gatorizing’ of extrusion consolidated billet
Superalloy powder engine components; controls employed to assure high quality hardware
Attack on superalloys by chemical and electrolytic processes
‘In situ’ composites for jet propulsion and stationary gas turbine applications
Damage of turbine blades due to interaction with fuel reflashification products
Where is cobalt irreplaceable
The gas turbine engine
Sheet materials - Fabrication and joining for high temperature and demanding environments
An evaluation study of aluminum and chromia alumina coatings on In-100
Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas turbine engines
The superalloys - Materials for gas turbine hot section components
A two-dimensional boundary-layer process for turbine airfoil heat transfer calculation
Engine experience of turbine rotor blade materials and coatings
Oxidation-resistant materials for hot-gas turbines
A new method of cooling turbine vanes
The enhancement of heat exchange in channels, 2nd revised and enlarged edition/ --- Russian book
A new method of cooling turbine vanes
External fuel vaporization study

HEAT FLOW

U HEAT TRANSISSION

Turbine stage heat flux measurements
A durable, intermediate temperature, direct reading heat flux transducer for measurements in continuous wind tunnels

HEAT GAIN

U HEATING

Heat transfer coefficient measurements on gas turbine components. I - Description, analysis and experimental verification of a technique for use in hostile environments
Measurements of heat transfer coefficients on gas turbine components. II - Applications of the technique described in part I and comparison with results from a conventional measuring technique and predictions
A durable, intermediate temperature, direct reading heat flux transducer for measurements in continuous wind tunnels
Assessment of burning characteristics of aircraft interior materials
Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of organic compounds

Heat transfer to engine exhaust products in an assumption of aircraft engine exhaust products in an assumption
The thermodynamics of有机 compounds
A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation.

Simulator investigations of various side-stick controllers/stability and control augmentation systems for helicopter terrain flight.

A ground-simulation investigation of helicopter decelerating instrument approaches.

Adaptive fuel control feasibility investigation.

Concept demonstration of automatic subsystem parameter monitoring -- ally helicopter cockpit instrumentation.

AVIONICS systems for helicopter integration.

NASA/FAA helicopter ATC simulation investigation of BBAV/HLS instrument approaches.

A restrained model helicopter, which is able to fly, for investigations regarding human multiparameter control behavior.

Electronic master monitor and advisory display systems, data transmission study.

Electronic master monitor and advisory display systems, human engineering summary report.

Electronic master monitor and advisory display system, operational functions report.

An investigation of multi-axis isometric side-axes controllers in a variable stability helicopter.

A control model for maneuvering flight for application to a computer-flight testing program.

A redundancy concept for a digital CSAS.

The influence of sensor and actuator characteristics on overall helicopter AFCS design.

Helicopter Handling Qualities.

VTOL and VSTOL handling qualities specifications, an overview of the current status.

Boeing 234 flight control development.

Flight tests for the assessment of task performance and control activity.

A helicopter handling-qualities study of the effects of engine response characteristics, height-control dynamics, and excess power on nap-of-the-Earth operations.

An assessment of various side-stick controllers/stability and control augmentation systems for night nap-of-Earth flight using piloted simulation.

Helicopter simulation technology: An Jews Research Center perspective.

Applications of system identification methods to the prediction of helicopter stability, control and handling characteristics.

Optimization of auto-pilot equations for rapid estimation of helicopter control settings.

Real-time simulation of an airborne radar for overwater approaches.

Toward a better understanding of helicopter stability derivatives.

Helicopter DESIGN:

The Equus A129.

Public service helicopters - Is the grass greener on the other side of the fence.

Optimization of blade pitch angle for higher harmonic rotor control.
| Mechanical properties of hot isostatic pressed titanium for helicopter components [NB-UD-32E-B1-0] | p0410 H82-25383 |
| Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design guide [AD-111100] | p0451 H82-26280 |
| User's manual for the coupled rotor/airframe vibration analysis graphic package [HASA-CB-165897] | p0566 H82-31299 |
| Design of helicopter rotor blades for optimum dynamic characteristics [HASA-CB-169352] | p0607 H82-33374 |

**HELICOPTER ENGINES**

<table>
<thead>
<tr>
<th>Subject Index</th>
<th>HELICOPTER ENGINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced component development design basis for next generation medium power helicopter engines</td>
<td>p0207 H82-17209</td>
</tr>
<tr>
<td>The influence of new turbine technologies on their components</td>
<td>p0207 H82-17210</td>
</tr>
<tr>
<td>Aerodynamic components for small turboshaft engines</td>
<td>p0207 H82-17211</td>
</tr>
<tr>
<td>Regenerative helicopter engines: Advances in performance and expected development paths</td>
<td>p0207 H82-17212</td>
</tr>
<tr>
<td>Helicopter air intakes</td>
<td>p0208 H82-17217</td>
</tr>
<tr>
<td>Intake design with particular reference to ice protection and particle separators</td>
<td>p0208 H82-17218</td>
</tr>
<tr>
<td>The distress regime on the boomed rotor helicopter</td>
<td>p0208 H82-17219</td>
</tr>
<tr>
<td>Engine/drive/airframe compatibility: A way of life</td>
<td>p0208 H82-17220</td>
</tr>
<tr>
<td>Problems of engine response during transient maneuvers</td>
<td>p0208 H82-17221</td>
</tr>
<tr>
<td>An alternative approach to engineering structures using monitoring systems</td>
<td>p0209 H82-17223</td>
</tr>
<tr>
<td>Component research for future propulsion systems</td>
<td>p0209 H82-17224</td>
</tr>
<tr>
<td>Future requirements for helicopter propulsion systems</td>
<td>p0209 H82-17225</td>
</tr>
<tr>
<td>Parametric study of the influence of the engine upon the operating cost of a civil helicopter</td>
<td>p0246 H82-18131</td>
</tr>
<tr>
<td>Measurement techniques used to assess the installed power of a helicopter engine</td>
<td>p0246 H82-18133</td>
</tr>
<tr>
<td>Component design and development for future helicopter engines</td>
<td>p0246 H82-18134</td>
</tr>
<tr>
<td>Three-engine control system for the prototype EH-101 helicopter [ASHE-9681-1568]</td>
<td>p0246 H82-18135</td>
</tr>
<tr>
<td>Parametric study of the influence of the engine upon the operating cost of a civil helicopter [S185-G-227-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>A helicopter handling-qualities study of the EH-101 helicopter [SITA-82100-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component research for future propulsion systems</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Measurement techniques used to assess the installed power of a helicopter engine</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component design and development for future helicopter engines</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Three-engine control system for the prototype EH-101 helicopter [ASHE-9681-1568]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Parametric study of the influence of the engine upon the operating cost of a civil helicopter [S185-G-227-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>A helicopter handling-qualities study of the EH-101 helicopter [SITA-82100-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component research for future propulsion systems</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Measurement techniques used to assess the installed power of a helicopter engine</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component design and development for future helicopter engines</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Three-engine control system for the prototype EH-101 helicopter [ASHE-9681-1568]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Parametric study of the influence of the engine upon the operating cost of a civil helicopter [S185-G-227-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>A helicopter handling-qualities study of the EH-101 helicopter [SITA-82100-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component research for future propulsion systems</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Measurement techniques used to assess the installed power of a helicopter engine</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component design and development for future helicopter engines</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Three-engine control system for the prototype EH-101 helicopter [ASHE-9681-1568]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Parametric study of the influence of the engine upon the operating cost of a civil helicopter [S185-G-227-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>A helicopter handling-qualities study of the EH-101 helicopter [SITA-82100-102]</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component research for future propulsion systems</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Measurement techniques used to assess the installed power of a helicopter engine</td>
<td>p0355 H82-22273</td>
</tr>
<tr>
<td>Component design and development for future helicopter engines</td>
<td>p0355 H82-22273</td>
</tr>
</tbody>
</table>

**HELICOPTER PERFORMANCE**

<table>
<thead>
<tr>
<th>Subject Index</th>
<th>HELICOPTER PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helicopter rotor trailing edge noise</td>
<td>p0088 H82-10455</td>
</tr>
<tr>
<td>Numerical treatment of helicopter rotor stability problems</td>
<td>p0091 H82-12045</td>
</tr>
<tr>
<td>Helicopter icing spray system - Improvements and flight experience</td>
<td>p0223 H82-12696</td>
</tr>
<tr>
<td>The Agusta A129</td>
<td>p0045 H82-13237</td>
</tr>
<tr>
<td>Heavy lift helicopters - A national technology opportunity</td>
<td>p0045 H82-13241</td>
</tr>
</tbody>
</table>
BILBOLIBF

BILBBIBOTIOI (BECBA1ICS)

BILBIB6BS

BIB6BO BOTOB BL1DBS

BIIGE BOBEBTS

HIBBDASCB

BILL BBIBOD

BILL BBTHOD

BISTOBIBS

NASA pocket statistics

History of tee sveptback «ing

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave seekers

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1918] p0035 H82-11050

[OGLB PAPEB 81-070] p0699 A82-22899

[HASA-TP-1958] p0082 A82-15748

A terminal guidance simulator for evaluation of millimeter wave successors
NEW SYSTEMS

Horizontal plane

[NASA-TR-46425] p0368 882-22337

Some comments on the prediction of forward flight effects on jet noise

[ASBE PAPEB 82-080] p0351 882-29118

Flap-lag-torsional dynamics of extensomnal and

[NASA-CS-169159] p0355 882-29312

inextensomnal rotor blades in hover and in

The aerodynamic influences of rotor blade taper,

twist, airfoilon and solidity on hover and

[AD-A111730] p0605 882-33357

forward flight performance

HORIZONTAL ORIENTATION

Static investigations of rotor blades under
deadweight and during stationary operation

[125-269] p0214 882-17639

HORIZONTAL STABILIZERS

[FLUID DYNAMICS]

HORIZONTAL TAIL SURFACES

Effect on surface pressures of trapezoidal holes

in a T-38 stabilator

[p0113 882-17602

Determination of the trimmed drag of an aircraft

[p0127 882-35083

Basic studies of the flow fields of

airfoil-flap-spoiler systems

[NASA PAPER 80-0173] p0195 882-22206

High angle-of-attack characteristics of

three-surface fighter aircraft

[NASA PAPER 82-0245] p0195 882-22207

7.37 graphite-epoxy horizontal stabilizer
certification

[NASA 82-9745] p0336 882-30109

Fabrication and test of integrally stiffened

graphite/epoxy components

[p0435 882-37071

Tests of CFPR spar/rub models with corrugated web

[p0495 882-39980

Fabrication of CFPR prototype structure for

aircraft horizontal tail leading edge flat tail rail

[p0495 882-39896

A CFPR taileron for the Tornado: Construction and

production

[NAS-FF-212/KEP/FK/2] p0027 882-10035

Ground calibration of a strain-gauged CT-4A

aircraft (1979)

[AD-A107847] p0189 882-16073

HORN ANEMOTRS

Research and development at NBB. Technical and

scientific publications, 1981

[p0360 882-23137

HOT CORROSION

BT TEMPERATURE DEPENDENCE

Damage of turbine blades due to interaction with

fuel recombmation products

[p0127 882-18479

Improved plasma sprayed WC/Co coatings for

aircraft gas turbine applications

[p0179 882-20042

The effect of NaC1/g in high temperature oxidation

[ASBE PAPER 80-GT-906] p0424 882-35342

HOT EXTENDING

C EXTENDING

HOT GAS SYSTEMS

C HIGH TEMPERATURE GASES

HOT GASES

C HIGH TEMPERATURE GASES

[125-270] p0442 882-35342

HOT JETS

C JET EXHAUST

C JET EXHAUST

HOT JETS

C JET EXHAUST

C JET EXHAUST

C JET EXHAUST

C JET EXHAUST

HOT PRESSING

Fabrication of boron/aluminum foil blades for SCM

engines

[NASA-CS-165296] p0192 882-16176

Repair and regeneration of turbine blades, vanes

and discs

[p0346 882-22185

Mechanical properties of hot isostatically pressed

P/M-titanium for helicopter components

[882-08-312-81-0] p0901 882-25383

Hot isostatically pressed manufacture of high

strength REE176 disk and seal shapes

[NASA-CS-165549] p0548 882-26439

HOT SURFACES

Development and testing of dry chemicals in

advanced extensomnal systems for jet engine

nozzle fires

[NASA-CS-165011] p0101 882-13186

Powder metallurgical innovations for improved hot

section alloys in aero-engine applications

[PHS-90072] p0357 882-22358

HOT-FLIGHT ANEMOMETERS

Rotor (flow research in low speed helicopter flight

[AD-A107873] p0199 882-17132

Non-steady velocity measurement of the wake of a

helicopter rotor at low advance ratios

[AD-A107722] p0199 882-17133

HOT-WIRE FLOWMETERS

Instantaneous turbulence profiles in the wake of an

oscillating airfoil

[NASA PAPER 82-0353] p0119 882-17901

Turbulence measurements in a confined jet using a

mixing-orientation hot-wire probe technique

[NASA PAPER 82-1262] p0439 882-37710

An experimental analysis of the shape of a rotor

wake

[p0245 882-18122

HOT-WIRE TURBULENCE METERS

HOT-WIRE FLOWMETERS

HOUSINGS

CV COWINGS

CV RADOMES

Ceramic turbine housings

[ASBE PAPER 80-GT-293] p0430 882-35463

HOVERCAPS

C GROUND EFFECT MACHINES

HOVERING

Application of the ONERA dynamic stall model to a

helicopter blade in forward flight

[ONERA, TP No. 1981-89]

Hover tests of the IV-15 Tilt Rotor Research

Aircraft

[NASA PAPER 81-2501] p0064 882-14386

Ground effect hover characteristics of a

large-scale twin tilt-scowle V/STol model

[AD-A10726] p0155 882-19201

Sensitivity of helicopter aeromechanical stability to

dynamic inflow

[p0273 882-25773

The vortex flow field generated by a hovering

helicopter

[p0276 882-26227

A finite element analysis of coupled rotor

fuselage vibration

[ANS PREPRINT 81-21] p0422 882-37792

A simplified approach to the free wake analysis of a

hovering rotor

[p0435 882-38474

Flying quality requirements for V/STOL transition

[NASA PAPER 82-1253] p0496 882-60276

Theory and application of optimum airloads to

rotors in hover and forward flight

[p0498 882-60506

Effect of tip vanes on the performance and flow

field of a rotor in hover

[p0498 882-60511

An investigation of scale model testing of V/STOL

aircraft in hover

[p0507 882-60911

An experimental and numerical study of 3-D rotor

wakes in a hovering flight

[p0510 882-60946

A restrained model helicopter, which is able to

fly, for investigations regarding human

multiparameter control behavior

[German thesis]

[p0543 882-61687

Experimental and analytical studies of a model

decelerator rotor in hover


A simplified approach to the free wake analysis of a

hovering rotor

[p0245 882-16121

Optimum performance and wake geometry of co-axial

rotor in hover

[p0249 882-18156

A numerical approach to co-axial rotor aerodynamics

[p0249 882-18157

A method of predicting fuselage loads in hover

[p0249 882-18164

A surface singularity method for rotors in hover

or climb

[AD-A103687] p0304 882-20778

A-255
Turbulence-excited flapping motion of a rotor
Performance and aeroelastic tradeoffs on recent
Aeroelastic stability of rotor blades using finite
Flap-lag-torsional dynamics of extensional and
Jet effects on forces and moments of a VSTOL
Aeroelastic analysis of the elastic gimbal rotor
The aerodynamic influences of rotor blade taper,
Fatigue life methodology
Hover tests of a model H-force rotor
An experimental investigation of a bearingless
Finite element analysis for bearingless rotor
Flag-lag-torsional dynamics or extensional and
Hover tests of a model H-force rotor
An analysis of a nonlinear instability in the
Implementation of a VTOL control system during
Hover
An analysis of a nonlinear instability in the
Implementation of a VTOL control system
Development of the Triflex rotor head
Main rotor hub electromagnetic signature reduction
Preliminary design of an advanced composite rotor
Hub for the HH-60A Black Hawk
Helioplar - A dual frequency rotorhead absorber
Aeroelastic analysis of the elastic gimbal rotor
Investigation of a rotor system incorporating a
constant lift tip
Investigation of a rotor system incorporating a
constant lift tip
Hughes helicopters - Fatigue life methodology
Hughes OH-6 Helicopter
Honeywell Flight Test Program
Hughes military aircraft
Hughes Aircraft
Hughes military aircraft
Human behavior - A theory of human error
Human factors engineering
Human factors engineering
Digital avionics - What a pilot expects to see
Electronic flight deck displays for transport aircraft
 sujet index
[IAIA-61-2264] F/A-18 'Horset' - One man operability
[IAIA-61-2266] 'Little people' problem /A-2 torso harness/
Computer image generation for flight simulation
Combined multisensor displays --- image preprocessing for shape coding to reduce pilot workload
Justification for, and design of, an economical programmable multiple flight simulator
The effects of the delays on systems subject to annual control
The system of 'objective control'
Evaluation of an automatic subsystem parameter monitor --- for aircraft
The evolution of display formats for advanced fighters using multimode color CRT displays
Electronic master monitor and advisory display system, human engineering summary report
Computer Air Carrier Symposium
Color CRT displays for the cockpit
Using voice control onboard combat aircraft
Experimental investigation of a helmet mounted sight/display for helicopter
Tanker avionics and aircraft complement evaluation
F/A 18 Hornet crew station
Raven aircraft filter-absorber --- agricultural aircraft
Taking into account nighttime annoyance in the
calculations of the psychog index
Spectrally balanced chromatic landing approach
lighting system
Aircraft alerting systems standardization study. Volume 2: Aircraft alerting system design
guidelines
Point of view of a helicopter manufacturer on airworthiness regulations
Multiple ejection effects analysis
Design of a catadioptric VCASS helmet-mounted
display
Technical approaches for measurement of human errors
A theory of human error
Control and displays for all-weather operation of
Helicopters
Current ADA restraint system status, trade-off
constraints and long range objectives for the
Maximum Performance Ejection System (MFES)
Proposed research tasks for the reduction of human error in naval aviation mishaps
Development of a backpack survival kit for
ejection seats
Human factors in air traffic control
The air traffic control system
Human factors contributions to air traffic control systems
Hydraulic Systems

Hydraulic Systems
0 Hydraulic Equipment

Hydraulic Test Tunnels
Flow visualization techniques for the study of high incidence aerodynamics
[CEWA, TP No. 1982-5] p0389 A82-34493

Use of the cavitation tunnel at the Dutch Naval Engineering Organization (HNSP), Wageningen for the determination of the acoustic source strength of propeller cavitation
[HNSP-908-720] p0530 A82-29116

Hydraulic Valves
0 Hydraulic Equipment

Hydraulics
- Australian Conference on Hydraulics and Fluid Mechanics, 7th, Brisbane, Australia, August 10-22, 1980, Preprints of Papers p0275 A82-26176

Hydrocarbon Combustion

An experimental study of the combustion of liquid hydrocarbon fuel sprayed into a diffusion hydrogen-air jet p0104 A82-16267

The sooting tendency of fuels containing polycyclic aromatics in a research combustor
[AIAG PAPER 82-0299] p0164 A82-19791

Fuel property effects on radiation intensities in a gas turbine combustor p0166 A82-19966

For formation in flat, laminar, opposed jet methane diffusion flames p0326 A82-26660

Numerical and experimental examinations of a precompressed/premixed combustor
[AIAG PAPER 82-1074] p0416 A82-34994

HC and CO emission abatement via selective fuel injection
[AIAG PAPER 82-CT-178] p0426 A82-35590

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 1: Properties in SI units
[AIAG-AP-1906] p0574 A82-32186

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 2: Compositions corresponding to Kelvin temperature schedules in part 1
[AIAG-AP-1907] p0575 A82-32187

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 3: Properties in U.S. customary units
[AIAG-AP-1908] p0575 A82-32188

Thermodynamic and transport combustion properties of hydrocarbons with air. Part 4: Compositions corresponding to Rankine temperature schedules in part 3
[AIAG-AP-1909] p0575 A82-32189

Hydrocarbon Fuel Production
Jet fuel from carbon p0018 A82-12021

Jet fuel locks to shale oil: The 1986 technology review
[AD-A104414] p0060 A82-11228

Development of catalytic systems for the conversion of syngas to jet fuel and diesel fuel and higher alcohols
[AD-A100067] p0090 A82-12255

Hydrocarbon Fuels
- NT Diesel Fuels
- NT Fossil Fuels
- NT Gasoline
- NT Jet Engine Fuels
- NT JP-4 Jet Fuel
- NT JP-5 Jet Fuel
- NT JP-6 Jet Fuel
- NT Liquid Fuels
- NT RP-1 Rocket Propellants

Deposit formation in hydrocarbon fuels
[AIAG PAPER 82-CT-49] p0222 A82-35307

Carbon formation by the pyrolysis of gas turbine fuels in prefire regions of gas turbine combustors
[AIAG PAPER 82-CT-86] p0423 A82-35330

Development and testing of dry chemicals in advanced extinguishing systems for jet engine nacelle fires
[AIAG-CE-165011] p0101 A82-13106

A-258

Atmospheric chemistry of hydrocarbon fuels, Volume 2: Outdoor chamber data tabulations, Part 1
[AD-A113665] p0530 A82-28842

Additional experiments on flowability improvements of aviation fuels at low temperatures, volume 2
[AIAG-CR-167912] p0571 A82-31546

Hydrocarbons
- NT ALEKNES
- NT BUTANIERE
- NT ETHANE
- NT NATURAL GAS
- NT PROPANE
- NT PYRINES

The effect of fuel composition on groundfall from aircraft fuel jettisoning
[AD-A1163503] p0321 A82-21244

Exhaust emissions reduction for intermittent combustion aircraft engines
[p0610 A82-33392

Hydrocarbon fuel chemistry: Sediment water interaction
[AD-A117528] p0612 A82-33592

Hydrocracking
Refining and upgrading of synfuels from coal and oil shales by advanced catalytic processes
[DE82-001127] p0213 A82-17401

Evaluation of hydrocracking catalysts for conversion of whole shale oil into high yields of jet fuels
[AD-A118260] p0476 A82-27523

Hydrocarbon Fuel Chemistry
Experimental methods for the prediction of the effect of viscosity on propeller performance
[AD-A105464] p0308 A82-20472

Hydrodynamic Runaway
Dynamic runaway in a missile motor
[AD-A110211] p0502 A82-17166

Hydrodynamic Stability
- u Flow Stability
- NT Plasma Jet Wind Tunnels

Hydrodynamics
- NT MAGNETOHYDRODYNAMICS

Hydrofoils
Accidents of surface effect ships and hydrofoil craft --- Russian book p0199 A82-18899

Hydrogen
- NT Liquid Hydrogen
- NT Tritium

Hydrogen Fuels
- NT Liquid Fuels

Fuel for future transport aircraft
[AIAG PAPER 82-116-80] p0012 A82-10965

An experimental study of the combustion of liquid hydrocarbon fuel sprayed into a diffusion hydrogen-air jet p0100 A82-16267

Technology innovation for success - Liquid hydrogen propulsion p0107 A82-16734

Liquid hydrogen - An outstanding alternate fuel for transport aircraft p0112 A82-17290

The prospects for liquid hydrogen fueled aircraft p0166 A82-20137

The potential for long-range high-payload aircraft with alternate fuels
[AIAG PAPER 82-0814] p0376 A82-31987

Will hydrogen-fueled aircraft be safe
[AIAG PAPER 82-1236] p0418 A82-35077

Hydrogen Isotopes
- NT Tritium

Hydrogen
- NT Tritium

Hydrogen-Based Energy
Hydrogen economy assessment for long-term energy systems in Japan p0378 A82-32159

Hydrogenization
Jet fuel from carbon p018 A82-12021

Refining and upgrading of synfuels from coal and oil shales by advanced catalytic processes
[DE82-001127] p0213 A82-17401

Hydrography
The Hydrographic Airborne Laser Sounder (HALS)
[AD-A111027] p0460 A82-26660
The influence of flow rate on the wake in a centrifugal impeller
[ASME PAPER 82-GT-65] p0421 AB2-35303

On the performance prediction of a centrifugal compressor scaled up
[ASME PAPER 82-GT-112] p0424 AB2-35345

Effect of impeller extended shrouds on centrifugal compressor performance as a function of specific speed
[ASME PAPER 82-GT-228] p0428 AB2-35611

INDEX

INFLIGHT MONITORING
Performance analysis of enroute air traffic control computer in the National Airspace System
[AIAA 81-2203] p0063 AB2-10140

Commercial EMS considerations for small gas turbine engines --- automated engine monitoring systems
p020 AB2-12849

Further application and development of an engine usage/life monitoring system for military services
p020 AB2-12850

Computer-in-control selection logic for a tripleplex digital flight control system
[AIAA 81-2236] p0047 AB2-13465

In-flight computation of helicopter transmission fatigue life expenditure
[AIAA PAPER 81-2434] p0055 AB2-13872

Direct strike lightning measurement system --- for aircraft
[AIAA PAPER 81-2513] p0057 AB2-13910

Improved techniques for the calibration and measurement of in-flight loads
[AIAA PAPER 81-2503] p0058 AB2-13924

Energy savings with today's technology --- aircraft fuel management through in-flight monitoring
p0111 AB2-17282

Gas path analysis --- a tool for engine condition monitoring
p0111 AB2-17286

The application of condition monitoring --- commercial helicopter in-service assurance
p0172 AB2-20542

Quick learning diagnostics --- helicopter vibration analysis and component condition monitoring
p0172 AB2-20543

Minimum cost performance monitoring of turboshaft engines
p0172 AB2-20544

Propulsion multiplexer /EMS/ system --- The missing link
[SAE PAPER 81-1078] p0233 AB2-24611

Flight test data acquisition and interpretation
p0239 AB2-24707

Flight condition recognition /RCR/ technique --- microprocessor-based recording for helicopter structural component fatigue damage
p0239 AB2-24712

Radian order data sharing filters for IHS in-flight alignment
p0482 AB2-38439

"Listening" systems to increase aircraft structural safety and reduce costs
p0492 AB2-39539

Concept demonstration of automatic subsystem parameter monitoring --- military helicopter cockpit instrumentation
p0500 AB2-40530

In-flight acoustic emission monitoring
p0548 AB2-62865

Use of DfelS in-flight simulator IFB 320 Hanna for handling qualities investigations
p0577 AB2-45146

Electronic master monitor and advisory display system, data transmission study
[AD-A104241] p0037 AB2-11064

Electronic master monitor and advisory display system, human engineering summary report

INDEXES (DOCUMENTATION)
NASA Authorization, 1982: Index
[GOH-85-713] p0031 AB2-10955

Index of National Aviation Facilities Experimental Center technical reports 1972 - 1977
[AD-A104759] p0066 AB2-12056

Index to NASA News Releases and Speeches, 1980
p0147 AB2-15905

A-262
Inflatable Structures

Evaluating sources of error in RAI/GRINS navigation using full scale flight test data - Electronically Coupled Radar/Non-Mapped Electrically Suspended Gyro Airborne Navigation System

Maneuver dependent component error models and synchronized reset filters for inertial navigation systems

Laboratory and flight test of a new BLG strapdown IBS

Position extrapolation quality calculation for inertial and Doppler-INS navigation systems

Post-Flight assessment of the JTIDS Bel Nav


Calibrated and uncalibrated inertial navigation system performance in valid and jeaked global positioning system environments

Integration of multi-sensor navigation data using optimal estimation techniques

Operational testing of the LW-3J inertial navigation system

Manual order time sharing filters for IBS in-flight alignment

Observeability of the parameters of an inertial navigation system for a 360-deg coordinated turn

Strapdown inertial navigation systems: An algorithm for attitude and navigation computations

Optimal inertial navigation using terrain correlation: An attractive solution to the ground attack aircraft navigation problem

Gravity induced position errors in airborne inertial navigation system

Geophysical flight line flying and flight path recovery utilizing the Lattor LN-76 inertial navigation system

Gravity induced position errors in airborne inertial navigation system

Strapdown inertial reference systems performance analysis

Software features applicable to inertial measurement unit self alignment

Ground speed measurement from DME/VHF omnirange navigation (FDB) data

Inertial Platforms

A failure detection and isolation system for tactical aircraft with separated IMUs

Integration of inertial sensors in helicopters

Software features applicable to inertial measurement unit self alignment

Ground speed measurement from DME/VHF omnirange navigation (FDB) data

Inertial Reference Systems

Integrated satellite navigation and strapdown attitude and heading reference systems for civil air carriers

The use of separated multifunction inertial sensors for flight control

Strapdown inertial reference systems performance analysis

The application of strapdown inertial technology to attitude and heading Reference System requirements -- for F16-64 advanced attack helicopter

Inertial Span Effects

The velocity potential for the harmonically oscillating, rectangular wing with semi-infinite span in nonlinear theory

Inflatable Devices

Inflatable Structures

Inflatable Structures
Inflating

High Altitude Balloons

Inflatable systems for fast deployment of parachutes at high altitudes from slow moving aircraft or stationary supports. An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil. Finite element approach to the calculation of unsteady aeroelastic influence coefficients in dynamic aeroelastic analysis. Further test results of parachutes with automatic inflation modulation.

Influence Coefficient

Finite element investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil. Finite element approach to the calculation of unsteady aeroelastic influence coefficients in dynamic aeroelastic analysis.

Information Dissemination

The Aviation Route Forecast /ARP/ program - An interactive system for Pilot Self-Briefing. The use of dynamic mock-ups in the design of wind shear avionics. The aviation route forecast /ARP/ program - An interactive system for pilot self-briefing. The ISL real-time aviation weather information system - An alternative to standard general aviation weather briefing procedures.

Infrared Emissions from Turbofans with High Aspect Ratio Nozzles

Infrared emissions from turbofans with high aspect ratio nozzles. Infrared emissions from turbofans with high aspect ratio nozzles.

Infrared Terrain

The WSI real-time aviation weather information system - An alternative to standard general aviation weather briefing procedures. Advanced crash survivable air data recorder and Accident Information Retrieval System.

Infrared Terrain

The WSI real-time aviation weather information system - An alternative to standard general aviation weather briefing procedures. Advanced crash survivable air data recorder and Accident Information Retrieval System.

Information System


Information Technology and Its Impact

Information technology and its impact on test and evaluation at the Naval Air Test Center.

Inflatable Wings

Further test results of parachutes with automatic inflation modulation.

Inflatable Balloons

Inflatable systems for fast deployment of parachutes at high altitudes from slow moving aircraft or stationary supports.
Final report on the PavePit-A major theme: interference drag with airborne engine integration on fighter aircraft p0098 882-13116

Wind tunnel tests of engine-equipped models: comparison of two jet wash simulation methods [NASA-TP-76760] p0134 882-14091

F-15 wind-tunnel/flight correlations p0404 882-25203

INLET FLOW

A large-scale investigation of engine influence on inlet performance at angle of attack [AIAA PAPER 81-2461] p0059 882-13939

A summary of V/STOL inlet analysis methods [NASA PAPER 81-2623] p0107 882-16902

Thrust modulation methods for a subsonic V/STOL aircraft [NASA-TP-82-2163] p0156 882-19213

An ejector supported chocking valve for the metering and control of inlet and bleed duct flows [AIAA 82-0575] p0036 882-24659

Comments on 'Nature of inlet turbulence and strait flow disturbances and their effect on turbojet/aircraft noise' p0277 882-26320

The excitation of compressor/duct systems p0327 882-26993

Evaluation of two analytical methods for the prediction of inlet flow fields in the vicinity of generalized forebodies [AIAA PAPER 82-0959] p0374 882-13952

The effect of inlet distortion on the performance characteristics of a centrifugal compressor [ASME PAPER 82-GT-92] p0424 882-35335

Prediction of cruise missile inlet peak instantaneous distortion patterns from steady state and turbulence data using a statistical technique [AIAA PAPER 82-1085] p0438 882-37685

A summary of V/STOL inlet analysis methods p0508 882-40921

A theoretical analysis of the stream surfaces of revolution with supersonic inlet flow in a transonic axial compressor p0033 882-11025

A summary of V/STOL inlet analysis methods p0034 882-11043

Effect of a part span variable inlet guide vane on transonic axial compressor characteristics of a centrifugal compressor [AIAA PAPER 82-GT-92] p0424 882-35335

Prediction and measurement of time-variant, three-dimensional flows in military aircraft intakes p0068 882-12075

Effects of intake geometry on circular pitot intake performance at zero and low forward speeds p0093 882-13069

Effects of intake geometry on circular pitot intake performance at zero and low forward speeds p0093 882-13069

The design and development of the Tornado engine air intake p0094 882-13070

The design and development of the Tornado engine air intake p0094 882-13070

An acquisition and analysis system for dynamic tests of air inlets p0095 882-13084

Model testing techniques for measuring inlet drag p0095 882-13084

Thrust modulation methods for a subsonic V/STOL aircraft p0098 882-13112

Numerical analysis of the scramjet-inlet flow field by using two-dimensional Navier-Stokes equations [NASA-TP-1940] p0099 882-13142

An experimental study of the effects of an inlet flow conditioner on the noise of a low speed axial flow fan -- in an aircraft engine [NASA-TP-6101] p0070 882-19556

Conditions of generation and methods of damping the inlet vortex of a turbojet engine [NASA-TP-76760] p0265 882-20182

Experimental and analytical results of tangential blowing applied to a subsonic V/STOL inlet [NASA-TP-62847] p0063 882-24165

Investigation of the tip clearance flow inside and at the exit of a compressor rotor passage [NASA-CE-169004] p0408 882-25253

A-265
INLET NOZZLES

Current status of inlet flow prediction methods
[NASA CR-165562]
p0955 82-26311

Acoustic properties of turbofan inlets
[NASA CR-165562]
p0952 82-27090

A summary of V/STOL inlet analysis methods
[NASA CR-82-63545]
p0521 82-28249

INLET NOZZLES

Low speed testing of the inlets designed for a
turbofan V/STOL nacelle
[ASME Paper 82-CF-215]
p1075 82-19291

Selected results of the F-15 propulsion
interactions program
[ASME Paper 82-1041]
p0415 82-34976

F-18 inlet development experience
[ASME Paper 82-CF-5]
p0419 82-35278

Development and application of c performance
prediction method for straight rectangular
diffusers
[ASME Paper 82-CF-122]
p0425 82-35352

TF 102 in-duct combustor noise measurements with a
turbine nozzle, volume 1
[NASA CR-165562-VOL-1]
p0309 82-21031

TF 102 in-duct combustor noise measurements with a
turbine nozzle, volume 2
[NASA CR-165562-VOL-2]
p0309 82-21032

TF 102 in-duct combustor noise measurements with a
turbine nozzle, volume 3
[NASA CR-165562-VOL-3]
p0309 82-21033

Aerodynamic analysis of V/STOL inlets and definition of a short, blowing-lip inlet
[NASA CR-165517]
p0349 82-22211

INLET PRESSURE

Acquisition of F-100/J/ high pressure compressor
entrance profiles
[ASME Paper 82-CF-215]
p0427 82-35402

Inlet and airframe compatibility for a V/STOL
fighter/attack aircraft with top-mounted inlets
[p0507 82-40908

Initial experimental research into the response of
turbojet engine compressors to distortion of
turbine nozzle, volume 1
[NASA CR-167879]
p0369 82-23246

INLET TEMPERATURE

JSF/JP-71 propulsion integration or the great
adventure into the technical unknown
[p0112 82-17418

Air cooling of gas turbine blades
[p0390 82-34700

Computer modeling of fan-exit-splitter spacing
effects on F100 response to distortion
[NASA CR-167879]
p0369 82-23246

INLETS (DIFFUSORS)

U INTAKE SYSTEMS

INOCULATION

Seeding considerations for an LV system in a large
transonic wind tunnel
[p0998 82-32689

INORGANIC COATINGS

UT CERAMIC COATINGS

INORGANIC SOLFIDES

UT POLYSULFIDES

INPUT/OUTPUT ROUTINES

A floating-point/multiple-precision processor for
airborne applications
[p0544 82-41868

Input/output models for general aviation
piston-prop aircraft fuel economy
[p0466 82-26215

A floating-point/multiple-precision processor for
airborne applications
[NASA CR-82-64252]
p0452 82-26289

INSPECTIONS

UT ENTHANSES

INSENSIVITY

U SENSITIVITY?

INSERTS

UT NOZZLE INSERTS

INSPECTION

UT X RAY INSPECTION

NSG-3 structures --- inspection program for
aircraft maintenance
[p0224 82-24011

NSG-3 overview --- aircraft maintenance program
development
[p0224 82-24014

Utility of a probability-density-function curve
and F-maps in composite material inspection
[p0327 82-28934

A computerized system for the application of
fracture tracking data to aircraft management
for the C-5A military airlift transport
[p0336 82-30119

Computer aided coordinate measuring systems --- in
evolution of design of helicopter components
[p0501 82-40540

Principles of achieving damage tolerance with
flexible maintenance programs for new and aging
aircraft
[p0517 82-41016

Computer Monitored Inspection Program (CMIIP/), a
tool to increase aircraft and personnel
productivity
[p0545 82-42217

Mathematical model for the maintenance program of
modern jet aircraft --- crack detection;
inspection intervals
(DISPL-81-14)
p0025 82-10002

The ultrasonic inspection of C.F.C. --- carbon
fiber-epoxy wave spars
[NASA-64626]
p0214 82-17513

Analysis of Built-In-Test (BIT) false alarm
conditions
[AD-A108752]
p0256 82-18217

Comparison of reliability, sensitivity and
accuracy of some NDT-Techniques
[AS-NL-80039-0]
p0371 82-23542

Method for refurbishing and processing parachutes
[NASA-CASG-ESC-11042-1]
p037 82-29330

STABILITY

U STABILITY

INSTALLATION MANUALS

U INSTALLING

INSTALLATION

Wind tunnel test and analysis techniques using
powered simulators for civil nacelle
installation drag assessment
[p0955 82-13340

INSTALLING

Wing tunnel test and analysis techniques using
powered simulators for civil nacelle
installation drag assessment
[p0955 82-13340

ROUGH analysis of installation effects on
turboprop noise
[NASA CR-82-62524]
p0574 82-32082

Some BIT laser velocimeter installation and
operation considerations
[p0599 82-32698

Development of avionics installation interface
standards
[AD-A116853]
p0680 82-33384

INSTRUCTIONS

U EDUCATION

INSTRUCTIONS

Task analytic techniques; Application to the
design of a flight simulator instructor/operator
console
[AD-A1048724]
p0257 82-18227

INSTRUMENT APPROACH

Helicopter decelerated steep approach and landing
to confined areas under instrument
meteorological conditions
[p0125 82-18161

The requirements for reduced IFR separations on
final approach
[p0219 82-23311

A Microwave Landing System simulation
[AD-A1048724]
p0220 82-23323

NASA/TAA Aircraft Inlet simulation investigation
of RMAV/MLS instrument approaches
[p0501 82-40535

Flight simulation studies on the feasibility of
laterally separated approaches in an MLS
environment
[p0505 82-40941

A tower approach to slant visual range observation
and prediction
[p0570 82-45818

In-service testing of the Precision Approach Path
Indicator (PAPI) at Newark International
Airport, New Jersey
[DOT/FAA/BD-81/95]
p0132 82-14076

A-266
Requirements for instrument approaches to converging runways
[AD-A106075] p0200 R82-17144
Survey of 101 US airports for new multiple instrument approach concepts --- runways
[AD-A107612] p0209 R82-17229
Weather determination models applied to alternate airport criteria
[AD-A100877] p0309 R82-20811
A ground-based investigation of helicopter longitudinal flying qualities for instrument approach
[NASA-TM-84225] p0611 R82-33398

INSTRUMENT COMPENSATION
FTTC standard airspeed calibration procedures
[AD-A106830] p0008 R82-12074

INSTRUMENT ERRORS
A concept for a high-accuracy, low-cost accelerometer
[AD-A106830] p0006 R82-14685
Analysis of flight test measurements in ground effect
[AD-A106830] p0178 R82-20763
The reliability of height and identity data --- secondary surveillance radar error analysis
[AD-A106830] p0341 R82-30312
Magnetic anomalies as a reference for ground-speed and map-matching navigation
[AD-A106830] p0341 R82-30314

INSTRUMENT FLIGHT RULES
Helicopter icing
[AD-A106830] p0066 R82-13243
Helicopter IFR - Past, present and future
[AD-A106830] p0066 R82-13245
Real-time simulation of helicopter IFR approaches into major terminal areas using NAV, HSI, and CDTI
[AD-A106830] p0118 R82-17868
Helicopter decelerated steep approach and landing to confined areas under instrument meteorological conditions
[AD-A106830] p0125 R82-18161
The requirements for reduced IFR separations on final approach
[AD-A106830] p0219 R82-23311
Utilizing the helicopter's versatility to improve the ATC system
[AD-A106830] p0219 R82-23316
A ground-simulation investigation of helicopter decelerating instrument approaches
[AD-A106830] p0468 R82-39118
Tandem rotor helicopter characteristics in a continuous icing environment
[AD-A106830] p0499 R82-40523
Estimation of the number of in-flight aircraft on instrument flight rules
[AD-A106830] p0518 R82-41117
Evaluations of helicopter instrument-flight landing qualities
[AD-A114004] p0524 R82-28205
Development of flying qualities criteria for single pilot instrument flight operations
[NASA-CR-165932] p0533 R82-29288
Inflight IFR procedures simulator
[NASA-CASE-ESC-1126-1] p0537 R82-29331
FAA air traffic activity, FY 1981
[AD-A106830] p0607 R82-33371

INSTRUMENT LANDING SYSTEMS
HT ALL-WEATHER LANDING SYSTEMS
HT AUTOMATIC LANDING CONTROL
Discrete address beacon, navigation, and landing system
[AD-A106830] p0010 R82-10650
The justification of the need for ILS by means of cost/benefit methods
[AD-A106830] p0109 R82-16973
A new end-fire ILS glide slope
[AD-A106830] p0122 R82-18143
Ground movement control and guidance --- Cat. 3 operations experience in Air Inter
[AD-A106830] p0167 R82-20222
GTD terrain reflection model applied to ILS glide scope --- Geometrical Theory of Diffraction
[AD-A106830] p0218 R82-23027
The toll of ILS-preventable aviation accidents
[AD-A106830] p0242 R82-25325
Instrument landing systems /ILS/ at airports of the German Democratic Republic
[AD-A106830] p0490 R82-39248
Simulated ILS using a laser tracker
[AD-A106830] p0543 R82-41795
The ILS in Category III operations --- ground-based support for French air routes
[AD-A106830] p0556 R82-44232
Requirements for instrument approaches to converge runways
[AD-A105622] p0132 R82-14079
Requirements for independent and dependent parallel instrument approaches at reduced runway spacing
[AD-A105622] p0132 R82-14080
A general aviation simulator evaluation of a rate-enhanced instrument landing system display
Requirements for instrument approaches to converging runways
[AD-A108075] p0200 R82-17144
Investigation of Wilcox model 5658 very high frequency omnidirectional radio range (VOR) system, part 3
[AD-A107855] p0200 R82-17149
Decent-rate climb for carrier landings: Effects of display gain, display noise and aircraft type
[AD-A108801] p0264 R82-19206
FM broadcast interference related to airborne ILS, VOR and VHF communications
[BTC/DO-176] p0268 R82-19419
Investigation of technical requirements
[AD-A106830] p0268 R82-19420
Investigation of airborne VHF communication and navigation equipment
[AD-A106830] p0268 R82-26280

INSTRUMENT PACKAGES
Planning a helicopter flight test program
[AD-A106830] p0056 R82-13881

INSTRUMENTAL ANALYSIS
U AUTOMATION
INSULATION
HT ELECTRICAL INSULATION
HT THERMAL INSULATION
HT INTERFERENCE SYSTEMS
HT AIR ENTRANCES
HT ENGINE ENTRANCES
HT INLET AIRFLOW CONFIGURATIONS
HT NOSE ENTRANCES
HT SUPERSONIC ENTRANCES
Airframe effects on top-mounted inlet systems for VSTOL fighter aircraft
[AD-A106830] p0156 R82-19212
The effect of intake flow disturbances on AFU compressor blade high cycle fatigue in the Airbus A300
[AD-A106830] p0512 R82-40593
Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure
[AD-A106830] p0532 R82-11066
Helicopter Propulsion Systems
[AD-A106830] p0206 R82-17203
Intake design with particular reference to ice protection and particle separators
[AD-A106830] p0206 R82-17218
Performance of single-stage axial-flow, transonic compressor with rotor and stator aspect ratios of 1.63 and 1.78, respectively, and with design pressure ratio of 1.82
[NASA-TP-1974] p0266 R82-19222
Current status of inlet flow prediction methods
[AD-A111748] p0655 R82-26311
A method for designing inlet distortion screens for aircraft gas turbine engine tests using an interactive computer program
[AD-A111684] p0569 R82-31325

INSTRUMENTAL PROGRAM FOR AEROSPACE VHF DESIGN
U IPAD
INTEGRAL EQUATIONS
A study on numerical method for evaluating approximate integral in subsonic lifting-surface theory
[AD-A106830] p1-267
In this document, the index entries include:

- **INTEGRAL TRANSFORMATIONS**
- **INTEGRATED OPTICS**
- **INTEGRATED CIRCUITS**
- **INTEGRATION (KERNEL VARIABLES)**
- **INTERFACERS**
- **INTERGROUOPDIFFERENTIAL EQUATIONS**
- **INTEROPERABILITY**
- **INTERFERENCE**
- **INTERFACES**
- **INTEGRATED GRAPHICS**
- **INTERCEPTORS**
- **INTERCEPTION**
- **INTERACTIVE CONTROL**
- **INTERACTIVE GRAPHICS**
- **INTERCEPTION**
- **INTERCONNECT**
- **INTERCONNECT INTERFACE**
- **INTERCONTINENTAL BALLISTIC MISSILES**
- **INTERFERENCE DRAG**
- **INTERHUMANIZATION**
- **INTERFERENCE EMBRAG**
- **INTERFERENCE EMBRAG**
- **INTERFERENCE NONE**
- **INTERFERENCE NONE**
- **INTERFERENCE SPECIFIC**
- **INTERGROUPDIFFERENTIAL EQUATIONS**
- **INTERPOLATION**
- **INTEROOPERABILITY**
- **INTERFERENCE DRAG**
- **INTERHUMANIZATION**
- **INTERFERENCE EMBRAG**
- **INTERFERENCE NONE**
- **INTERFERENCE SPECIFIC**
INVISIBILITY

The arbitrary quasi-orthogonal surface method for computing three-dimensional flow in turbine machinery. 2. Calculation of the three-dimensional flow with the 5 sub 1-surface treated.

Aerodynamic aspects of a high bypass ratio engine installation on a fuselage afterbody.

A numerical method for studying nacelle-jet-airfoil interaction in inviscid three-dimensional flow.

Prediction of wing side-edge suction forces and nacelle inviscid lift.

Modified version of LYRAB: A calculation method for inviscid transonic flow about thin airfoils in moderately low unsteady motion.

[ML-79-80059-1]

Computation of three-dimensional unsteady nonuniform flow in the blade-free annular channel of a turbine - military aircraft, turbocompressors.

[ONERA-RP-1982-2]

INVISIBILITY

ION GASES

IONIZATION GASES

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters.

IONIZED GASES

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters.

IONIZING RADIATION

IONOSPHERIC EFFECTS

The effect of ionospheric variability on the accuracy of high frequency position location.

[AD-A107425]

IONOSPHERIC PROPAGATION

IONOSPHERIC DISTURBANCES

The effect of ionospheric variability on the accuracy of high frequency position location.

[AD-A107425]

IONOSPHERIC P-SCATTER PROPAGATION


[AGARD-LS-110]

IONOSPHERIC NOISE

IONOSPHERIC PROPAGATION

IONOSPHERIC PROPAGATION

The effect of ionospheric variability on the accuracy of high frequency position location.

[AD-A107425]

Transverse electric waves for VLF/LF communication between aircraft.

[AD-A115834]

IONOSPHERIC REFLECTION

IONOSPHERIC PROPAGATION

IF (IMPACT PREDICTION)

A COMPUTERIZED SIMULATION

IPAD

Development of Integrated Programs for Aerospace-Vehicle Design (IPAD) - IPAD user requirements.

[NASA-CS-2965]

IRON ALLOYS

IRON ALLOYS

MET CARBON STEELS

MET HIGH STRENGTH STEELS

MET STAINLESS STEELS

MET STEELS

Formability of INCOLOY alloy 895 - An oxide dispersion strengthened sheet alloy.

[ML-79-80059-1]

ISOQUANT HELICOPTER

ISO-1 HELICOPTER

ISOTROPIC FLOW

ISOFLUID FLOW

ISOTOPE MODELS

ISO-MATHEMATICAL MODELS

J-58 ENGINE

J-50/J58-71 propulsion integration or the great adventure into the technical unknown.

J-79 ENGINE

The P-16/79 test program.

[IAA PAPER 81-2014]

J-85 ENGINE


[IAA PAPER 82-1044]

JACOBS (ELECTRONICS)

JULIUS SHIPMENTS

JILLIPOIDS

JARBERS

Georgia Tech coherent jammer flight test.

[IAA PAPER 81-2952]

JARBERG

Relay-augmented data links in an interference environment.

An analysis of anticollision communication requirements in fading media.

Calibrated and uncalibrated inertial navigation system performance in valid and jammed global positioning system environments.

[Horton CH - Fros B-10 to F-5E]

Preliminary airworthiness evaluation of the 78-18 with hot metal plus plasma infrared suppressor and infrared jammer.

[AD-A102113]

JARRING

MECHANICAL SHOCK

JC-130 AIRCRAFT

U-130 AIRCRAFT

JEEPS

JEEPS

JMB AIRCRAFT

J-5 AIRCRAFT

J-7 AIRCRAFT

J-9 AIRCRAFT

J-16 AIRCRAFT

J-300 AIRCRAFT

J-200 AIRCRAFT

J-30 AIRCRAFT
### JET AIRCRAFT NOISE

<table>
<thead>
<tr>
<th>Subject Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>15</td>
</tr>
</tbody>
</table>

### JET AIRCRAFT NOISE

- Compilation of the total costs incurred in the employment of passenger jet aircraft
- Development of a composite vertical stabilizer for a jet trainer
- Two-dimensional model studies of the impact of aircraft exhaust emissions on tropospheric ozone
- Operation T10F - Development of a composite material wing
- Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods
- In-flight acoustic emission monitoring
- The influence of closed-coupled, rear fuselage mounted nozzles on the design of an advanced high-speed wing
- Symposium on commercial-aviation energy conservation strategies
- Multiple pure tone elimination strut assembly for jet aircraft engines
- Forecasting corrosion damage and maintenance costs for large aircraft
- Corrosion control measures for military aircraft: Present & future requirements and future developments
- Corrosion prevention methods developed from direct experience with aerospace structures
- Further development of the test concept of the L-1011-1 TriStar jet aircraft
- Aircraft noise reduction for Boeing 700 series jet transports using OPTIM and TRACEN
- Cost and fuel consumption per nautical mile for B-747 jet transports using OPTIM and TRACEN
- B-747 vortex alleviation flight tests: Ground-based sensor measurements
- Gust response of commercial jet aircraft including effects of autopilot operation
- Computer enhanced analysis of a jet in a cross-stream

### JET AIRCRAFT NOISE

- Screech suppression in supersonic jets
- The effect of non-linear propagation in jet noise
- High-frequency sound emission from moving point multipole sources embedded in arbitrary transversely sheared mean flows
- The impact and future direction of aircraft noise certification
- Model-based study of various configurations of jet aeronautics - Application to the CEPHA 19 wind tunnel of CRFPA
- Model test and full-scale checkout of dry-cooled jet runup sound suppressors
- Digital spectral analysis of the noise from short duration impulsively started jets
- Aircraft noise reduction for Boeing 700 series
- SEL and EPL noise duration coefficients for the 707 and 7-38 aircraft
SUBJECT INDEX

Thermodynamics of organic compounds
[AD-A1165769] p0263 A82-19196

The effect of fuel composition on groundfall from
turbojet engines
[AD-A1014351] p0318 A82-21202

Impact study of synthetic and alternative fuels
in aircraft propulsion systems
[AD-A1114860] p0321 A82-21924

Evaluation of hydrocarbon fuels in temperature-programmed
ramp capability gas chromatography. Part I:
Qualitative identification
[AD-A1113550] p0390 A82-26455

Experiments on fuel heating for commercial aircraft
[AD-A1182878] p0459 A82-26483

Sustainability fuels for the Navy
[AD-A1125547] p0459 A82-26485

The biological degradation of spilled jet fuels:
A literature review
[AD-A1107565] p0461 A82-26873

Effect of some nitrogen compounds thermal
stability of jet A
[AD-A1166222] p0476 A82-27519

Evaluation of hydrocracking catalysts for
conversion of heavy oil into high yields
of jet fuels
[AD-A1128200] p0476 A82-27523

An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 1:
Preliminary process analyses
[AD-A1111217] p0527 A82-20462

An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 2:
Process variable analyses and laboratory sample
production
[AD-A1112682] p0528 A82-20463

United States Air Force shale oil to fuels, phase 2
[AD-A1116151] p0528 A82-29476

An investigation of the effects of smoke
suppressant fuel additives on engine and test
cell exhaust gas opacity
[AD-A1161717] p0571 A82-31548

Characterization of an Experimental Refereed
Broadened Specification (EBBS) aviation turbine
fuel and EBBS fuel blends
[AD-A982888] p0595 A82-32504

Analysis and environmental fate of Air Force
distillate and high density fuels
[AD-A1155499] p0595 A82-32512

Integrated energy management study. Energy
efficient transport program
[AD-A875989] p0599 A82-32850

An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 3:
Process analyses and experimental design
[AD-A1174348] p0612 A82-33551

Hydrocarbon fuel chemistry: Sediment water
interaction
[AD-A1179258] p0612 A82-33552

JET ENGINES

A-273

Water ingestion into jet engine axial compressors
[IAIA PAPER 82-00166] p0082 A82-15024

F101DPE in Tomcat - Preliminary test results
[IAIA PAPER 82-17036] p0126 A82-18346

Procurement monitor helps make jet engines more reliable
[IAIA PAPER 82-21987] p0183 A82-21987

Low grade fuels for turbo and jet engines
[AD-A1108237] p0221 A82-23439

Air cooled engine test facilities
[AD-A1125777] p0223 A82-26004

Airline fuel saving through JT9D engine
refurbishment
[IAIA PAPER 810105] p0232 A82-26585

F-22C engine test engine system
[AD-A1119293] p0295 A82-27903

The United States Air Force Automated Vibration
Diagnosis System (AVID) for improved jet
engine maintenance
[AD-A1125673] p0295 A82-27904

Development of an aircraft engine
[AD-A1128543] p0386 A82-34912

Propulsion system requirements for advanced
fighter aircraft
[IAIA PAPER 82-11431] p0417 A82-35025

Control of gas turbine power transients for
improved turbine airfoil durability
[IAIA PAPER 82-11827] p0418 A82-35047

Acoustic emission in jet engine fan blades
[AD-A1149794] p0419 A82-35257

Dry friction damping mechanisms in engine blades
[AD-A1170481] p0427 A82-35381

Cycle considerations for tactical fighters in the
early 1990's
[AD-A1178951] p0428 A82-35436

Composite containment systems for jet engines
[AD-A82-37062] p0435 A82-37062

Current techniques for jet engine test cell modeling
[AD-A1182878] p0439 A82-37712

Redundant control unit for an advanced twin-spool
gas turbine engine
[AD-A1182878] p0515 A82-40999

High pressure systems for hot-gas turbines and
ejets engines
[AD-A1182878] p0543 A82-41725

Subsonic military aircraft engine intake: An
integrated theoretical experiment design
[AD-A82-33073] p0549 A82-13073

The design and development of the Tornado engine
air intake
[AD-A1182878] p0549 A82-13074

Integration of advanced exhaust nozzles
[AD-A1182878] p0549 A82-13075

Development and testing of dry chemicals in
advanced ATR systems for jet engine
nacelle fires
[AD-A82-16501] p0101 A82-13186

System for acquisition and analysis of dynamic
tests on air intakes
[AD-A982646] p0131 A82-14046

Pollution reduction technology program small jet
aircraft engines, phase 3
[AD-A82-165086] p0134 A82-14093

EMDS fuel additive: Pollution reduction
technology program small jet aircraft engines,
phase 3
[AD-A82-165307] p0134 A82-14096

Application of integration algorithms in a
parallel processing environment for the
simulation of jet engines
[AD-A982674] p0138 A82-14889

Prediction of sound radiation from different
practical jet engine inlets
[AD-A82-165120] p0195 A82-16810

CFD jet engine performance improvement: High
pressure turbine blockage
[AD-A82-165555] p0203 A82-17174

Acoustic measurements of F100-PW-100 engine;
operating in hot house, 59°, 920-02-070-2721
[AD-A106814] p0270 A82-19952

Acoustic measurements of F-15 aircraft operating
in hot house, 59°, 920-02-070-2721
[AD-A105928] p0310 A82-21042

Acoustic measurements of F-16 aircraft operating
in hot house, 59°, 920-02-070-2721
[AD-A105928] p0310 A82-21043
Experimental investigation of a jet inclined to a subsonic crossflow  

(AIAA Paper 81-2610) p0199 882-18994

Local heat transfer to staggered arrays of impinging circular air jets  

(AIAA Paper 82-47-211) p0155 882-19202

Fluid dynamics of jets with applications to V/STOL  

[AGARD-CP-308] p0027 882-19401

Flowfield and noise sources of jet impingement of flaps and ground surface  

p0361 882-23163

JET NOISE  
Evaluation of the effects of model scale and test technique on jet-induced effects  

p0361 882-23167

JET MIXING FLOW  
Numerical study of vibrational relaxation in the turbulent mixing of jets in a supersonic nozzle  

p0334 882-29860

Investigation of acoustic interactions in jet thrust augmenting ejectors  

[AD-106063] p0101 882-13835

Fluid dynamics of jets with applications to V/STOL  

[AGARD-CP-308] p0350 882-23150

Some aspects of jet dynamics and their implications for VTOL research  

p0360 882-23151

Unsteady ejectors  

p0362 882-23171

JET NOISE  
U JET AIRCRAFT NOISE  
JET PILOTS  
U JETPILOTS  
JET PROPELSION  
Further development of the test concept of the ALPHA JET engine LAMBC On  

p0257 882-18223

Thrust augmenting ejectors: A review of the application of jet mechanics to V/STOL aircraft propulsion  

p0361 882-23169

Development potential of Interattent Combustion (I.-C.) aircraft engines for converter transport applications  

[NASA-TB-82069] p0453 882-26297

JET STAR AIRCRAFT  
U C-140 AIRCRAFT  
JET TURBO  
Performance assessment of an advanced reheat turbine fan engine  

(AIAA Paper 81-2407) p0055 882-13879

Reliable power --- RB211 aircraft engines  

[JFW-90078] p0355 882-22275

Experimental study of a jet deflector  

p0362 882-23173

Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center  

[NASA-TB-54523] p0600 882-33149

JET VANS  
Effects of vane/blade ratio and spacing on fan noise  

[AIAA Paper 81-2033] p0008 882-10457

JETAVIORS  
U GUIDER VANS  
JETTISON SYSTEMS  
The effect of fuel composition on groundfall from aircraft fuel jettingoning  

p0321 882-21424

JITTER  
U VIBRATION  
JOBS  
U TASKS  
JOINTS (JUNCTIONS)  
MT LAP JOINTS  
MT METAL JOINTS  
MT BURIED JOINTS  
MT SHEET METALS  
MT WELDED JOINTS  
Design of the corporate spar-wingskin joint  

Improved composite bolted joint efficiency by laminate tailoring  

p0166 882-20128

Sensitivity of bonded and bolted joints in composites to load/environmental spectrum variations --- in fighter aircraft structures  

p0289 882-27158

Fatigue behavior of adhesively bonded joints  

p0328 882-29032

Theoretical and experimental investigation of joint-structural damping interaction for airplane construction  

p0496 882-39292

Practical applications of fracture mechanics  

[AGARD-46-257] p0516 882-41013

Advanced concepts for composite structure joints and attachment fittings. Volume I: Design and evaluation  

[AD-A10121] p0321 882-21261

JOURNAL BEARINGS  
Four pad tilting pad bearing design and application for multistage axial compressors  

[AIAA Paper 81-106-12] p0126 882-18049

Optimum journal bearing parameters for minimum rotor unbalance response in synchronous whirl  


Evaluation of graphite/epoxy shafts in a high capacity laminate helicopter bearing  

p0289 882-27155

The effect of journal amalgamation of high-film forces generated in a squeeze-film dapor  

[AIAA Paper 82-GT-205] p0430 882-35457

Performance of PTFE-lined composite journal bearings  

[ASLE PREPRINT 82-M-IA-1] p0443 882-37854

Bear weight by generation of electrokinetic streaming currents  

[ASLE PREPRINT 82-M-6A-3] p0443 882-37857

Analysis of tapered-land hybrid aerostatic journal bearings  

p0584 882-47994

Gas fuel bearing development program  

p0561 882-30556

JOURNALS (SHAFTS)  
U SHAFTS (RACEWAY ELEMENTS)  
JP-4 JET FUEL  
Determination of selected distillate blending solvents in simple and complex aircraft fuel matrices via glass capillary gas chromatography  

[AD-105588] p0135 882-14312

Determination of pyridine in modified JP-4 via High Performance Liquid Chromatography (HPLC)  

[AD-105589] p0135 882-14313

Evaluation of three percent aqueous Pila Porangona from (AFFF) concentrates as fire fighting agents --- JP-4 jet fuel fires  

[AD-110801] p0411 882-25402

An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1: Production of specification of JP-4 fuel from geokinetics shale oil  

[AD-112683] p0528 882-26464

Vapor condensation control of JP-4 emissions from underground storage tanks at March Air Force Base, California  

[AD-1117875] p0612 882-33554

JP-5 JET FUEL  
An alternate test procedure to qualify future fuels for Navy aircraft  

[AIAA Paper 82-1233] p0343 882-36175

JP-5 JET FUEL  
Performance analysis of JP-8 fuel conversion evaluation  

p0177 882-20755

Determination of selected distillate blending solvents in simple and complex aircraft fuel matrices via glass capillary gas chromatography  

[AD-105588] p0135 882-14312

JUNGLES  
U TROPICAL REGIONS  
K

K BAND  
U EXTREMELY HIGH FREQUENCIES  
KA BAND  
U EXTREMELY HIGH FREQUENCIES  
KALMAN FILTERS  
Evaluating sources of error in EAR/GRINS navigation using a Kalman postprocessor --- Electronically Agile Badar/Gimbaled Electrically suspended gyro Airborne Navigation System  

p0668 882-14739

Application of multiple model estimation techniques to a recursive terrain height

A-275
KALMAN-SCHMIDT FILTERING

correlation systems
Target acceleration modeling for tactical missile guidance
Maneuver dependent component error models and synchronized reset filters for inertial navigation systems
Post-flight assessment of the JTIDS BelNav
A stable decentralized filtering implementation for JTIDS BelNav -- stable community relative navigation
Fixed gain controller design for aircraft
Optimal control and estimation for strapdown seeker guidance of tactical missiles
Rotor state estimation for rotorcraft
Adaptive filtering for an aircraft flying in turbulent atmosphere
Robust Kalman filter design for active flutter suppression systems
Optimal Kalman filter design for solving the radar tracking problem --- German thesis
Application of Kalman filtering technique to aerodynamic derivatives for a helicopter
Extension of proportional navigation by the use of optimal filtering and control methods
Application of Kalman filtering to the kinematic reconstruction of free flight of catapulted aircraft models in the laboratory
Real time estimation and prediction of ship motions using Kalman filtering techniques
Designs of analytical failure detection using secondary observers
KALMAN-SCHMIDT FILTERING
Digital command augmentation for lateral-directional aircraft dynamics
APPLICATION OF KALMAN FILTERING TO AIRCRAFT FORCES (SAM-71-11)
KAPTEN (TRADEMARK)
Analyses of "Kapten" polyimide film in aerospace applications
KCI-130 AIRCRAFT
U C-130 AIRCRAFT
KCI-135 AIRCRAFT
KELVIR-HELBOLTZ INSTABILITY
Kelvin-Helmholtz stability analysis of air cushion landing gear trunk flutter
KERNEL FUNCTIONS
On the kernel function collocation method in steady subsonic flow for wing with control surfaces
An accurate method for evaluating the kernel of the integral equation relating lift to downwash in unsteady potential flow
KEROGEN
HT LIQUID FUELS
KEROGEN
HT LIQUID FUELS
Aircraft fire safety research with antiicing fuels -- status report
Commercial aircraft airframe fuel system surveys
Commercial aircraft airframe fuel system surveys and analysis
KEVLAR (TRADEMARK)
Kevlar composite; Proceedings of the Symposium, El Segundo, CA, December 2, 1980
Seven years experience with Kevlar-49 in the Lockheed L-1011 TriStar
Skyship 500 - The development of a modern production airship
Design of a composite main rotor blade spar for fabrication by tubular braiding
Kevlar/PFR-15 polyimide matrix composite for a complex shaped DC-9 drag reduction fairing
Development of manufacturing technology for fabrication of a composite helicopter main rotor spar by tubular braiding
Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept
Concept studies of an advanced composite helicopter fin
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
KINETICS
Analytical determination of undercarriage retraction kinetics
Kinematic investigation Hughes Helicopter 7.62mm chain gun
Kinematic precision of gear trains
KINETICS
KINETIC FRICTION
HT SLIDING FRICTION
KINETIC HEATING
HT AERODYNAMIC HEATING
KINETIC THEORY
HT MIXING LENGTH FLOW THEORY
KINETICS
HT ELECTROKINETICS
HT AERODYNAMIC KINETICS
KIRCHHOFF-HUTINGS PRINCIPLE
HT DIFFRACTION
HT WAVE PROPAGATION
KT6S
Development of a backpack survival kit for ejection seats (AD-AD113963)
KRONHEIMER PRODUCT
HT ORTHOGONALITY
KT BAND
HT SUPERHIGH FREQUENCIES
KUPPS AIRCRAFT ORIENTATION
HT C-141 AIRCRAFT
KUTTA-JOHDROWSKY CONDITION
A summary of V/STOL inlet analysis methods
L BAND
HT ULTRAHIGH FREQUENCIES
L-1011 AIRCRAFT
History of flight testing the L-1011 Tristar jet transport. II - Testing highlights since initial certification of the L-1011-1
Seven years experience with Kevlar-49 in the Lockheed L-1011 TriStar
Fault isolation methodology for the L-1011 digital avionic flight control system  
[AIAA 81-2225] p0047 82-13458
Digital active control system for load alleviation for the Lockheed L-1011  
[AIAA 81-2225] p0104 82-16147
Sonic fatigue testing of an advanced composite airframe  
[AIAA PAPER 81-0636] p0283 82-26567
Advanced technology DPS control panel for the L-1011-500  
[AIAA PAPER 82-2240] p0328 82-92000
Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011  
[AIAA PAPER 82-1297] p0487 82-39304
Accelerated development and flight evaluation of active control concepts for subsonic transport aircraft. Volume I: Load alleviation/extended span development and flight tests  
[AIAA-CE-159097] p0165 82-15076
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft  
[AIAA-CE-156594] p0357 82-22316
LABORATORIES
AT ADVANCED TECHNOLOGY LABORATORY  
AT ENGINE TESTING LABORATORIES
LABORATORY EQUIPMENT
Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft  
[AIAA-TR-84518] p0550 82-43278
LABYRINTH SEALS
Design and testing of a new double labyrinth seal  
[AES TECHNICAL PAPER 81-LRD-50] p0127 82-18452
Sealing effects on leakage losses in labyrinth seals  
[AES TECHNICAL PAPER 82-CT-157] p0426 82-35380
Labyrinth seal effects on rotor bearing system stability  
[AD-1116774] p0599 82-32742
LAG
U TIME LAG
LAMECH COORDINATES
Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test  
[p0245 82-18127
LAGrangian MULTIPLIERS
Mathematical programming in engineering design problems  
[p0803 82-15864
Power system design optimization using Lagrange multiplier techniques  
[p0178 82-20743
LAMINA  
U LAYERS
LAMINAR BOUNDARY LAYER
The effect of the cooling of the wing surface on laminar-to-turbulent boundary layer transition at supersonic flow velocities  
[p0128 82-18591
Visualization of laminar separation by oil film method  
[p0179 82-20811
Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test  
[AIAA 82-0566] p0236 82-26656
Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces  
[p0505 82-40894
External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing  
[p0505 82-40895
Heat transfer from nozzles under the conditions of flow laminarization  
[p0583 82-46831
Amplified crossflow disturbances in the laminar boundary layer on swept wings with suction  
[AIAA-PP-1902] p0091 82-11391
Probability of laminar flow loss because of ice crystal encounters  
[p0302 82-20153
LAMINAR BOUNDARY LAYER SEPARATION  
U LAMINAR BOUNDARY LAY  
LAMINAR FLOWS
U LAMINAR FLOW
LAMINAR FLOW
On low-speed wind tunnels with deformable boundaries  
[AIAA PAPER 82-0823] p0373 82-31853
A simple finite difference procedure for the vortex controlled diffuser  
[AIAA PAPER 82-2109] p0115 82-17788
Box formation in flat, laminar, opposed jet methane diffusion flames  
[p0326 82-26660
Calculation of level flow using radial grating  
[p0484 82-39322
Observations and implications of natural laminar flow on practical airplane surfaces  
[p0505 82-40893
Natural laminar flow airfoil analysis and trade studies  
[AIAA-CE-159029] p0140 82-15018
Laminar flow control SFP/08 feasibility demonstration  
[AIAA-CE-165018] p0322 82-21532
Effect of modification of the trailing edge of a separating wall on the downstream mixing of parallel flowing streams [AD-111124] p0394 82-21481
Laminar flow control, 1976 - 1982: A selected annotated bibliography  
[AIAA-TR-84496] p0572 82-31645
Surface flow visualization requirements for testing in N IF  
[p0596 82-32667
NASA research on viscous drag reduction  
[p0604 82-33344
LAMINAR FLOW AIRFOILS
The NASA Langley laminar flow control airfoil experiment  
[AIAA PAPER 82-0567] p0381 82-33327
Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces  
[p0505 82-40894
External aerodynamic design for a laminar flow control glove on a Lockheed JetStar wing  
[p0505 82-40895
Programs at Douglas on laminar flow control applied to commercial transport aircraft  
[p0511 82-40958
Laminar airfoils for transport aircraft  
[AIAA-TR-680] p0252 82-18190
Laminar Flow Control. The Research and Technology Studies 1981  
[AIAA-TR-2218] p0301 82-20149
NASA Langley laminar flow control airfoil experiment  
[p0301 82-20150
Status of NASA advanced LFC airfoil high-lift study  
[p0301 82-20151
Stability of boundary layers with porous suction strips: Experiment and theory  
[p0301 82-20152
Probability of laminar flow loss because of ice crystal encounters  
[p0302 82-20153
SFP/DB titanium concepts for structural efficiency for HC  
[p0302 82-20154
SFP/DB titanium LFC porous panel concept  
[p0302 82-20155
Drag reduction using pneumatic turbulators — laminar airfoils  
[DFVLR-FS-81-33] p0350 82-22223
LAMINAR FLOW CONTROL  
U BOUNDARY LAYER CONTROL  
U LAMINAR BOUNDARY LAYER  
LAMINAR HEAT TRANSFER
Approximate method of predicting heating on the windward side of Space Shuttle Orbiter and comparisons with flight data  
[AIAA PAPER 82-0825] p0373 82-31853
LAMINAR JETS  
U JET FLOW
LAMINAR FLOW  
U LAMINAR FLOW
LAMINAR MATERIALS  
U LAMINATES
LAMINATES
Impact-initiated damage thresholds in composites  
[p0018 82-12028
Improvement of the first-ply-failure strength in laminates by using softening strips  
[p0104 82-16147
On the track of practical forward-swept wings  
[p0154 82-19071

FACEPROOF BRAKE HYDRAULIC SYSTEM
[AD-111119] p0407 N82-25245

EXPERIMENTAL INVESTIGATION OF ACTIVITY LOADS CONTROL FOR AIRCRAFT LANDING GEAR
[NASA-TP-20402] p0568 N82-31321

DESCRIPTION OF A SIMPLE MODEL TO DETERMINE LANDING GEAR FORCES DURING THE TAKEOFF OF AERODYNAMICALLY UNSTABLE AIRCRAFT
[EN-22B] p0570 N82-31333

A SBA VERTICAL DRAG TEST REPORT --- ROTOR SYSTEMS RESEARCH AIRCRAFT
[NASA-CE-165399] p0587 N82-32341

LANDING DEVICES

RT APPROACH INDICATORS
AERIAL VISUAL AIDS RESEARCH AT THE ROYAL AIRCRAFT ESTABLISHMENT
[AD-RM-PS-413] p0351 N82-22242

LANDING LOADS
AN ELECTRONIC CONTROL FOR AN ELECTROHYDRAULIC ACTIVE CONTROL LANDING GEAR FOR THE F-14 AIRCRAFT
[NASA-CE-3552] p0353 N82-22252

AUTOMATED OPTIMUM DESIGN OF WING STRUCTURES, DETERMINISTIC AND PROBABILISTIC APPROACHES
[NASA-CE-165399] p0353 N82-29317

LANDING SIMULATION

COMPUTER-ANIMATED PREDICTIVE DISPLAYS FOR MICROWAVE LANDING SYSTEMS
[AD-52-16928] p0382 N82-15016

VISUAL SCENE SIMULATION CONCERNING THE LANDING OF SPORTING AIRCRAFT IN CONNECTION WITH INVESTIGATIONS REGARDING THE CONTROL AND LEARNING BEHAVIOR OF THE PILOT --- GORAN THIMON
[NASA-CE-169238] N82-14147

EILS VERTICAL GUIDANCE AND NAVIGATION FOR A STOL AIRPLANE LANDING ON AN ELEVATED STOLPORT
[NASA-CE-169238] p0135 N82-18101

DYNAMIC SCHEDULING OF RUNWAY OPERATIONS
[NASA-TP-20402] p0445 N82-26200

MARINE AIR TRAFFIC CONTROL AND LANDING SYSTEM (BACSTEC) INVESTIGATION
[AD-52-16928] p0466 N82-27260

REPORTS BY SYSTEMS TECHNOLOGY, ETC., IN SUPPORT OF CARRIER-LANDING RESEARCH IN THE VIRTUAL TECHNOLOGY RESEARCH SIMULATOR
[AD-A112461] p0474 N82-27232

DESIGN, SIMULATION AND EVALUATION OF ADVANCED DISPLAY CONCEPTS FOR THE F-16 CONTROL CONFIGURED VEHICLE
[NASA-CE-169238] p0563 N82-38059

REAL TIME ESTIMATION AND PREDICTION OF SHIP MOTIONS USING KALMAN FILTERING TECHNIQUES
[NASA-CE-169238] p0572 N82-31637

LANDING SYSTEMS

LANDING AIDS

UNITED STATES COAST PILOT 9. PACIFIC AND ARCTIC COASTS ALASKA: CAPE SPENCER TO BEAUFORT SEA
[PHR-16928] p0254 N82-18201

LANDSCAPE

U TERRAIN
U TOPOGRAPHY

LANDER PROBES

U ELECTROSTATIC PROBES

LANGUAGES

MT PORTABLE
MT HIGH LEVEL LANGUAGES
MT PASCAL (PROGRAMMING LANGUAGE)
MT OBJECT PROGRAMMING LANGUAGES

LAP JOINTS

A COMPARISON OF PROPORTIONS OF SINGLE OVERLAP TENSION JOINTS PREPARED BY ULTRASONIC WELDING AND OTHER MEANS
[ASA-62-0641] p0335 N82-30091

LARGE SPACE STRUCTURES

AEROSPACE HIGHLIGHTS 1981
[AD-111119] p0103 N82-16135

FISCAL YEAR 1981 SCIENTIFIC AND TECHNICAL REPORTS, ARTICLES, PAPERS, AND PRESENTATIONS
[NASA-TP-20402] p0195 N82-16137

LASER ARMOURED SYSTEMS

DEVELOPMENT AND TEST OF A THERMAL EMISSION VELOCIMETER FOR APPLICATION TO AN EMISSION NOSE TESP TEST FACILITY
[AD-52-16928] p0213 N82-17842

LASER ANGULAR VELOCIMETRY IN AN AXIAL CASCADE OF CORE TURBINE VANES AND COMPARISON WITH THEORY
[NASA-TP-20402] p0447 N82-26234

STATUS OF LASER ANEMOMETRY IN TURBOMACHINERY RESEARCH AT THE LASER RESEARCH CENTER
[NASA-CE-169238] p0598 N82-32688

VELOCITY AND FLOW ANGLE MEASUREMENTS IN THE LANGLEY 0.3-METER TRANSONIC CRYOGENIC TUNNEL USING A LASER TRANSIT ANEMOMETER
[NASA-CE-169238] p0599 N82-32697

SOME HTP LASER VELOCIMETER INSTALLATION AND OPERATION CONSIDERATIONS
[NASA-CE-169238] p0599 N82-32698

LASER APPLICATIONS

MT LASER PROPULSION

DIGITAL DETECTION AND PROCESSING OF LASER BEOCON SIGNALS FOR AIRCRAFT COLLISION HAZARD WARNING
[ASB-CE-169238] p0592 N82-32792

DEVELOPMENT OF A LASER VELOCIMETER IN THE VACCANY TUNNEL USING A LASER TRANSIT ANEMOMETER
[NASA-CE-169238] p0599 N82-32697

LASER APPLICATIONS IN WEAPON GUIDANCE AND ACTIVE IMAGING
[NASA-CE-169238] p0343 N82-37567

LASER BEAMING IN A TURBULENT ATMOSPHERE
[NASA-CE-169238] p0543 N82-41795

LASER COMMUNICATION

U OPTICAL COMMUNICATION

LASER DOPPLER VELOCIMETERS

MEASUREMENTS OF VELOCITY DISTRIBUTIONS IN THE LEADING EDGE VORTEX OF A Delta Wing BY THE LASER-DOPPLER PROCEDURE
[AD-111119] p0483 N82-30091

LASER DOPPLER VELOCIMETER APPLIED TO THE STUDY OF THE AIRFLOW IN THE WAKE OF AN HELICPPTER ROTOR
[NASA-CE-169238] p0552 N82-43755

PRELIMINARY EXPERIMENTS ON A CENTRIFUGAL RESEARCH COMPRESSOR USING A LASER-2-FOCUS VELOCIMETER
[NASA-CE-169238] p0553 N82-43756

APPLICATION OF LASER VELOCIMETRY TO LARGE INDUSTRIAL WIND-TUNNELS
[NASA-CE-169238] p0553 N82-43757

LASER VELOCIMETRY FOR LARGE INDUSTRIAL WIND-TUNNELS
[NASA-CE-169238] p0599 N82-32697

A NOVEL EXPERIMENTAL INVESTIGATION OF THE FLOW FIELD OF AN EJECTOR WING DESIGN EMPLOYING A PHOTON CORRELATION LASER VELOCIMETER
[AD-111119] p0394 N82-25612

LASER VELOCIMETER HARDWARE AND SOFTWARE INTEGRATION FOR PC-DATA ACQUISITION AND REDUCTION OF PHOTON CORRELATED LASER DOPPLER VELOCIMETER DATA
[AD-111119] p025506

A COLOR VIDEO DISPLAY TECHNIQUE FOR FLOW FIELD SURVEYS
[NASA-CE-169238] p0596 N82-32669

DEVELOPMENT OF A LASER VELOCIMETER FOR A LARGE TRANSONIC WIND TUNNEL
[NASA-CE-169238] p0598 N82-32688

SEEDING CONSIDERATIONS FOR AN LV SYSTEM IN A LARGE TRANSONIC WIND TUNNEL
[NASA-CE-169238] p0598 N82-32688

LV MEASUREMENTS WITH AN ADVANCED TURBOFAN ENGINE
[NASA-CE-169238] p0598 N82-32696

APPLICATIONS OF A LASER VELOCIMETER IN THE LANGLEY 4- BY 7-METER TUNNEL
[NASA-CE-169238] p0596 N82-32693

Laser Doppler velocimetry application to the Langley 0.3-meter Transonic Cryogenic Tunnel
[NASA-CE-169238] p0599 N82-32696

SOME HTP LASER VELOCIMETER INSTALLATION AND OPERATION CONSIDERATIONS
[NASA-CE-169238] p0599 N82-32698

Beta experiment flight report
[NASA-CE-170622] p0613 N82-32698

LASER GUIDANCE

LASER APPLICATION IN WEAPON GUIDANCE AND ACTIVE IMAGING
[NASA-CE-169238] p0433 N82-37567

U.S. ARMY REMOTELY PILOTED VEHICLE PROGRAM
[NASA-CE-169238] p0493 N82-39732

LASER GYROSCOPES

RING LASER GYRO NAVIGATOR /RIG/ FLIGHT TEST RESULTS
[NASA-CE-169238] p0203 N82-12684

LABORATORY AND FLIGHT TEST OF A NEW BLG STRAPDOWN INS

A-279
LASER INTERFERENCE

Laser interferometry

Laser gyro - the guiding light

An investigation of ring laser gyroscopes random walk experiments

Laser interferometer method for determining the forces on a freely-flying model in a shock-tunnel

Laser propulsion

A concept for light-powered flight

Laser radar

U optical radar

Laser range finders

Radar for USA

Range finder system for slant range visibility

Baseline monitoring using aircraft laser ranging

Laser tracking (NASA-TM-73296)

Laser radar/tracker

ATAC laser tracking system

Options for GPS precision automated tracking system

Wide field of view laser beacon system for three-dimensional aircraft position measurement

Electro-optical vector scoring system for in situ ozone data for comparison with laser absorption remote sensor: 1980 PEP/RAGOS program

ATAC laser tracking system

Laser spectrometers

In situ ozone data for comparison with laser absorption remote sensor: 1980 PEP/RAGOS program

Laser target designators

Electro-optical vector scoring system for missile miss distance in flight training exercises

Laser江门-194/DSC-9)

Detection of obstacles by a low flying aircraft using CO2 laser: mathematical model

Laser targets

Laser beam control

Laser weapon applications in weapon guidance and active imaging

Laser weapon application in weapon guidance and active imaging

Laser welding

NT brazing

NT fusion welding

Lasers

NT carbon dioxide lasers

NT excimer lasers

NT gas lasers

NT dynamic lasers

NT helium-neon lasers

NT high power lasers

NT helium lasers

NT pulsed lasers

NT ring lasers

NT TAG LASERS

Wearfield aerodynamics and optical propagation characteristics of a large-scale target model

LASV

U P-111 aircraft

LAVITY Heat of Fusion

U heat of fusion

Lateral control

Procedures and analysis techniques for determining static air aluminum control speeds

Design and flight test of a lateral-directional command augmentation system

A cost effective method for the control of roll due to side slip on a low speed aircraft

Analytical control law for desirable aircraft lateral handling qualities

The ideal controlled element for real airplanes is not K/s

Investigation of low order lateral directional transfer function models for augmented aircraft

Flying qualities requirements for roll C G systems

Analysis of a longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle

An observer approach to the identification and isolation of sensor failures in flight control systems

Leading edge flap system for aircraft control augmentation

Lateral control system design for V/STOL landing on a 0.0963 in high sea states

Control optimization, stabilization and computer algorithms for aircraft applications

Lateral oscillation

Notes on lateral-directional pilot-induced oscillations

LATERAL STABILITY

A cost effective method for the control of roll due to side slip on a low speed aircraft

A new method of estimating the lateral wall effect on the airflow incidence due to the suction at side walls

AIAA-78-600

ACTAA: Investigation of new piloting and flight control technologies. Volume 2: Aircraft with reduced lateral stability

Angular wing (NASA-Case-VRC-11007-2)

Descript of a simple model to determine landing gear forces during the takeoff of aerodynamically unstable aircraft (ER-228)

Curved flow wind tunnel test of F-16 aircraft

LATERALITY

U lateral stability

Lateralization

U Laterally control

Laser square method

Geometrical aspects of the tribological properties of graphite fiber reinforced polyamide composites

Lattices (Mathematics)

Lifting surface theory for wings in low frequency small amplitude yawing and side slipping oscillating motions at low speeds

A doublet lattice method for the determination of rotor induced enpenage vibration airloads

Analysis description and program documentation

Launch vehicles

Integrated structural analysis and design support for advanced launch vehicles

Launchers

NT catapults

NT guns launchers

NT missile launchers

Helical rail glider launcher

U.S. Army remotely piloted vehicle supporting technology program

Launchers

Launches

Alternative employment concepts for remotely piloted vehicles (RPV) FLEET/TV mission payload

Launches

Launch vehicles

Launchers

Law (Jurisprudence)

U air law

U international law
Leading edge flaps
Traction edge flap influence on leading edge vortex flap aerodynamics

[Ref: AIAA PAPER 82-0126] p0115 A82-17799
Recent advances in applying Free Vortex Sheet theory to the estimation of vortex flow aerodynamics

[Ref: AIAA PAPER 82-0095] p0183 A82-22045
Pothole effects in leading edge vortex flap aerodynamics

Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices

(data report)

[Ref: NASA-CS-12506] p0139 A82-15014
Laminar Flow Control. The Research and Technology Studies 1981

[Ref: NASA-CS-22110] p0301 A82-20149
Status of NASA advance LFC airfoil high-lift study

Leading edge flap system for aircraft control augmentation

[Ref: NASA-CS-LAR-12787-1] p0078 A82-25240
Leading edge slats
On the evaluation of influence of local discontinuities of flow over trailing edge and leading edge flaps from the data of wind tunnel tests of a rectangular wing segment

[Ref: AIAA PAPER 82-11465] p0015 A82-11465
On the use of carbon composites in slot and stabilizer construction

Fabrication of CFRP prototype structure for aircraft horizontal tail leading edge slat rai

The application of subscale theoretical aerodynamics to active controls --- aircraft controls

[Ref: NASA-TE-81060] p0320 A82-21217
Leading edges
MT BLUNT LEADING EDGES
MT SHARP LEADING EDGES
AV-8B technical update - Leading edge root extension development

[Ref: AIAA PAPER 82-14940] p0077 A82-14940
Effect on surface pressures of trapezoidal holes in a 7-18 etabliser

[Ref: AIAA PAPER 82-17602] p0115 A82-17602
Alliation of the subscale pitch-up of delta wings

[Ref: AIAA PAPER 82-0125] p0115 A82-01252
History of the sweptback wing

[Ref: AIAA PAPER 81-070] p0699 A82-22898
Investigation of heat transfer in the vicinity of the leading and trailing edges of a cooled vorse blade of a low-consuming gas turbine

[Ref: NASA-CS-126052] p0295 A82-28018
Crossflow shock on the suction side of a flat delta wing with supersonic leading edges

[Ref: AIAA PAPER 82-29659] p0332 A82-29659
Thermodynamic performance of an airplane wing leading edge anti-icing system

[Ref: AIAA PAPER 82-0851] p0373 A82-31871
Investigations regarding vortex formation at wings with heat leading edges

[Ref: AIAA PAPER 82-38783] p0483 A82-38783
Leading edge separation at delta wings with curved leading edges in supersonic flow

[Ref: AIAA PAPER 82-38784] p0483 A82-38784
Measurements of velocity distributions in the leading edge vortex of a delta wing by the laser-Doppler procedure

Lateral aerodynamics of delta wings with leading edge separation

[Ref: AIAA PAPER 82-13863] p0483 A82-38786
Inflated wings

[Ref: AIAA PAPER 82-39142] p0490 A82-39142
An experimental investigation of leading-edge spanwise blowing

[Ref: AIAA PAPER 82-40966] p0512 A82-40966
Spanwise distribution of vortex drag and leading-edge suction in subsonic flow

[Ref: AIAA PAPER 82-41005] p0516 A82-41005
Icing tunnel tests of a composite porous leading edge for use with a liquid anti-ice system --- Third Icing research tunnel

[Ref: NASA-CS-164966] p0035 A82-11052
Development of an efficient procedure for calculating the aerodynamic effects of planform variation

[Ref: NASA-CS-3489] p0137 A82-1529
Experimental study of delta wing leading-edge devices for drag reduction at high lift --- conducted in Langley 7- by 10-foot high speed tunnel

[Ref: NASA-CS-165585] p0198 A82-17125
Water tunnel flow visualization and wind tunnel data analysis of the F/A-18 --- leading edge extension vortex effects

[Ref: NASA-CS-1655859] p0194 A82-25215
Effects of wing-leading-edge modifications on a full-scale, low-wing general aviation airplane:
Wind-tunnel investigation of high-angle-of-attack aerodynamic characteristics --- conducted in Langley 30- by 60-foot tunnel

[Ref: NASA-CS-1655859] p0045 A82-22617
Flow over wings with leading-edge vortex separation

[Ref: NASA-CS-1655858] p0048 A82-26238
User's manual for interfacing a leading edge, vortex rolling program with two linear panel methods

[Ref: NASA-CS-1655858] p0060 A82-33340
LEAKAGE

Design and testing of a new double labyrinth seal

[Ref: NASA-CS-1655858] p0127 A82-10452
Scaling effects on leakage losses in labyrinth seals

[Ref: NASA-CS-1655858] p0246 A82-35380
USAF bioenvironmental noise data handbook. Volume 160: NF-3 tester, pressurized cabin leakage, aircraft

[Ref: NASA-CS-1655858] p0045 A82-13102
The all composite Lear Fan 2100

[Ref: NASA-CS-1655858] p0077 A82-14936
Acceptance testing of the Calpsan variable stability Learjet

[Ref: NASA-CS-1655858] p0077 A82-14937
Determination of Learjet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data

[Ref: NASA-CS-1655858] p0116 A82-17827
A series of airfoils designed by transonic drag minimization for Gates Learjet aircraft

[Ref: NASA-CS-1655858] p0342 A82-35565
Lear Fan 2100 egress system

[Ref: NASA-CS-1655858] p0044 A82-37970
The sixteen to forty micron spectroscopy from the

[Ref: NASA-CS-1655858] p0130 A82-21054
LEARNING

MT TRANSFER OF TRAINING
Learning and costs in airframe production, part 1

[Ref: NASA-CS-1655858] p0077 A82-14936
LEAST SQUARES METHOD

Performance estimation from non-steady maneuvers

[Ref: NASA-CS-1655858] p0054 A82-13863
Optimization of measurements in the data on the estimation of systems using the least squares method

[Ref: NASA-CS-1655858] p0332 A82-29826
Short-term behavior of a Doppler navigation system and comparison with position indication by means of scanning radar

[Ref: NASA-CS-1655858] p0390 A82-45672
Application of Kalman filtering technique to aerodynamic derivatives for a helicopter

[Ref: NASA-CS-1655858] p0577 A82-45189
Complete guide to Rutan homebuilt aircraft --- Book  
The reliability and safety of small passenger aircraft  
Comparison of light aircraft with strutted and cantilever wings  
Ultralight airplanes  
The computerized cockpit for the one-man crew  
Sport aircraft --- Russian book  
Computational and experimental studies of light twin aerodynamic interference  
Assessment of advanced technologies for high performance single-engine business airplanes  
The design integration of wingtip devices for light general aviation aircraft  
Exterior noise on the fuselage of light propeller driven aircraft in flight  
Experimental modal analysis of the fuselage panels of an Aero Commander aircraft  
Socata: TB 20 Trinidad given German debut  
Evaluation of noise control technology and alternative noise certification procedures for propeller-driven small airplanes  
Laser gyros - The guiding light  
Experimental modal analysis of the fuselage panels of a large-scale turret model  
Heads up display  
Silicon liquid crystal light valve for flight simulation applications  
The multi mode matrix flat panel display: Technology and applications  
Liquid crystal light valves for flight simulation applications  
Nearfield aerodynamics and optical propagation characteristics of a large-scale turret model  
Study of fiber optics to enhance an environmental lighting laboratory  
Optical properties of airfield lighting fixtures of the Royal Netherlands Airforce. Part 1: Color measurements  
Optical properties of airfield lighting fixtures of the Royal Netherlands Airforce. Part 2: Intensity measurements  
Effects of approach lighting and variation in runway length on perception of approach angle in simulated night landings  
Examination of aircraft interior emergency lighting in a postcrash fire environment  
Lighting  
Lightning  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event  
Lighting  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event  
Lighting  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event  
Lighting  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event  
Lighting  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event  
Lighting  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event  
Lighting  
Lighting effects on aircraft and composites. Literature study on lightning strike and protection --- advanced composite materials  
Investigation of severe lightning strike accidents to two USAF F-106A aircraft  
Ramp security systems for natural and aircraft-initiated lightning  
The direct effects of lightning on aircraft  
Electromagnetic interaction of lightning with aircraft  
Lightning simulation and testing  
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria  
The 1981 direct strike lightning data --- utilizing the F-106 aircraft  
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs  
Protection of advanced electrical power systems from atmospheric electromagnetic hazards  
A comparison of lightning effects on future aircraft electronics systems  
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage  
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling  
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lightning/aircraft interaction event  
Atmospheric electricity hazards analytical model development and application. Volume 3: Electromagnetic coupling modeling of the lightning/aircraft interaction event
SUBJECT INDEX

LIGHTING SUPPRESSION
Assessment methodology of the lighting threat to advanced aircraft p0069 82-14759

Aircraft lighting protection [CONF, TP No. 1982-51] p0382 82-33548

LIGHTS
U LIMITATIONS

LIGHTS
Refining and upgrading of syntheses from coal and oil shale by advanced catalytic processes [DE82-001127] p0213 82-17401

LIBRARY (ANATOMY)
On the aerodynamics of windblast [AD-A110495] p0405 82-25221

LIMITATIONS
U CONSTRAINTS

LINE OF SIGHT
Experimental investigation of a helmet mounted sight/display for helicopter p0076 82-20684

Comparison of analytical predictions of longitudinal short period pilot-induced oscillations with results from a simulation study of the space shuttle orbiters [NASA-TM-83267] p0368 82-23236

LINE OF SIGHT COMMUNICATION
Relay-suggested data links in an interference environment p1038 82-28828

LINEAR ARRAYS
NT EMPIRE ARRAYS
The design of a viewing system for near real time stereo images from a URA borne linescan sensor — Unmanned Aircraft p0494 82-39746

LINEAR EQUATIONS
LQG-based multivariable design: Frequency domain interpretation p0029 82-10053

LQG multivariable design tools p0030 82-10054

LINEAR FILTERS
NT BUBBLE FILTERS

LINEAR PREDICTION
Theoretical linear approach to the combined man-manipulation system in manual control of an aircraft [NBS-FE-301/5/FUB/43] p0320 82-21220

LINEAR PROGRAMMING
Mathematical programming in engineering design problems p0083 82-15864

LINEAR SYSTEMS
An application of total synthesis to robust coupled design — turbojet engine control p0154 82-19061

Estimation of the performance of nonstationary discontinuous control systems for flight vehicles p0333 82-29832

Linear decentralized systems with special structure — for twin lift helicopters p0388 82-34359

Automation of the synthesis of control in a stationary linear system — for aircraft flight control p0389 82-34464

Application of multivariable model following method to flight controller [AIAA PAPER 82-1369] p0068 82-39120

Limitations on achievable performance of multivariable feedback systems p0029 82-10052

Design of high integrity multivariable control systems p0030 82-10055

A geometric approach to multivariable control system synthesis p0030 82-10056

Multivariable designs: The optimization of approximate inverses p0030 82-10057

Feedback and matrix sensitivity p0030 82-10058

Theory of stochastic optimal control some basic notions p0038 82-11075

Computational methods of robust controller design for aerodynamic flutter suppression

LIQUID COOLING
Acoustical measurements of F-16 aircraft operating in hush house, MSH 4920-02-070-2721 (AD-4105829) p0310 82-21043

LIQUID CRYSTALS
An integrated control panel utilizing a programmable varistor-multiplexed dichroic liquid crystal display [AIAA 81-2303] p0050 82-13508

Silicon liquid crystal light valve for flight simulation applications [AD-A110926] p0413 82-26005

LIQUID DROPS
U DROPS (LIQUIDS)

LIQUID FLOW
Factors influencing velocity distributions at inlet/compressor interfaces p0321 82-21405

LIQUID FUELS
An experimental study of the combustion of liquid hydrocarbons fuel sprayed into a diffusion hydrogen-air jet p104 82-16267

Liquid hydrogen – an outstanding alternate fuel for transport aircraft

LIQUID FUELS

LIQUID FUELS

LIQUID FUELS
LIQUID HYDROGEN

Deposit formation in liquid fuels. I - Effect of coal-derived Lewis bases on storage stability of jet & turbine fuel. p0112 A82-17290

Seal-empirical analysis of liquid fuel distribution downstream of a plain orifice injector under cross-stress air flow. p0106 A82-22241

LIQUID HYDROGEN

ST LIQUID FUELS

Fuel for future transport aircraft. [ASME PAPER 82-07-86] p0012 A82-10965

Technological innovation for success - Liquid hydrogen propulsion. p0107 A82-16734

LIQUID INJECTION

Ignition particle dynamics and rate of evaporation in the rotating field of centrifugal compressors. [ASME PAPER 82-12-86] p0416 A82-35077


LIQUID ROCKET PROPPELLANTS

ST CHROMIC ROCKET PROPPELLANTS

ST LIQUID FUELS

ST RP-1 ROCKET PROPPELLANTS

Determination and analysis of jet and missile fuel deposits. AD-A105456. p0090 N82-12248

LIQUID SLOSHING

Airframe fuel tank slosh and vibration test. p0344 A82-22164

LIQUID-GAS MIXTURES

ST AEROSOLS

ST FOAM

LIQUID-SOLID INTERFACES

Factors influencing velocity distributions at inlet/compressor interfaces. p0321 N82-21945

LIQUIDS

ST CHROMIC ROCKET PROPPELLANTS

ST HYDRAULIC FLUIDS

ST LIQUID FUELS

ST LIQUID HYDROGEN

ST LIQUID ROCKET PROPPELLANTS

ST ORGANIC LIQUIDS

ST RP-1 ROCKET PROPPELLANTS

A study of the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials. NASA-CR-165763. p0256 N82-18327

LISTS


LITERATURE

ST BIOGRAPHY

ST DOCUMENTATION

ST PROCEEDINGS

LOAD DISTRIBUTION (FORCES)

Forces affecting vibrations of a wing carrying a concentrated load /asymptotic behavior/. p0120 A82-18620

A practical approach to systems mode analysis - for disc-blade-shroud assemblies. ASME PAPER 81-DEP-130. p0162 A82-19344

Zone loading of flight-vehicle structures. p0334 A82-2893B

A method of accounting for the effect of aircraft deformations on its loading. p0288 A82-31177

Calculation of wing-body-nacelle interference in subsonic and transonic potential flow. p0097 N82-13095

LOAD FACTORS

0 LOADS (FORCES)

0 LOADS (FORCES)

LOADING ROBOTS

Some naturally aerodynamic effects on helicopter rotors. p0250 N82-18162

LOADING OPERATIONS

GOT and Z of the F-16 20mm ammunition loading system's ability to upload/download A-70 aircraft. AD-A100007. p0192 N82-16999

Advanced internal cargo system concept demonstration and evaluation. AD-A11990. p0451 N82-26522

LOADING WAFERS

0 LOADS (FORCES)

LOADS (FORCES)

ST AEROSOLIC LOADS

ST AERIAL LOADS

ST BLAST LOADS

ST CONCEPTION LOADS

ST CRITICAL LOADING

ST CYCLIC LOADS

ST DYNAMIC LOADS

ST ELLIPTIC LOADS

ST GUST LOADS

ST IMPACT LOADS

ST LANDING LOADS

ST HARDW LOADS

ST SHOCK LOADS

ST SPECIFIC LOADS

ST VIBRATORY LOADS

ST WING LOADS

A method for observing the deterioration of airframe life in operational conditions. p0436 A82-37123

Pneumatic tire model for aircraft simulation. p0555 N82-46244
Flight-by-flight corrosion fatigue tests
Preliminary study of ground handling characteristics of Boeing Quad Rotor (BQR) vehicles
[BASA-CR-166130] p0447 N82-26220
Hurricane-induced wind loads
[PO82-I32267] p0476 N82-27548
Wind tunnel studies of store separation with load factor. Freedrops and captive trajectories
[AD-A115507] p0559 N82-30312
The lateral response of an aircraft to turbulence
[AD-A115197] p0569 N82-31324
Simulation of the interaction between multidrop platforms and aircraft rollers
[AD-A116370] p0569 N82-31324

LOCATIONAL
U POSITION (LOCATION)
U POSITION (LOCATION)
LOCKHEED AIRCRAFT
NT C-5 AIRCRAFT
NT C-130 AIRCRAFT
NT C-40 AIRCRAFT
NT L-1011 AIRCRAFT
NT F-3 AIRCRAFT
NT T-33 AIRCRAFT
Development of the Lockheed SR-71 Blackbird
p0112 A82-17417
LOCKEY C-5 AIRCRAFT
U C-5 AIRCRAFT
LOTTING
Computer graphics for quality assurance
p0167 A82-20276
LOGIC CIRCUITS
Automatic digital gain ramping — for flight test telemetry data
[AI A PAPEB 81-2370] p0660 A82-13947
LOGIC DESIGN
Computer-in-control selection logic for a triplex digital flight control system
[AI A PAPEB 82-2326] p0467 A82-13465
The DBAPO system — Materials means and logic functions
p0437 A82-37521
Stage-state reliability analysis technique
p0196 N82-21704
Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance
[AD-A107805] p0200 N82-17148
The influence of sensor and actuator characteristics on overall helicopter design
p0251 N82-18171
[BASA-TM-84484] p0448 N82-26236
Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 2
[AD-A115511] p0570 N82-31332
LOGIC NETWORKS
U LOGIC CIRCUITS
LOGISTICS
The all electric airplane — Its development and logistic support
p0667 A82-14709
Strategic materials - Technological trends
p0444 A82-37972
Design and implementation of USAF avionics integration support facilities
[AD-A115537] p0558 N82-30307
Pap’s theorem for nonstationary processes
[AD-A117085] p0614 N82-34135
LOGISTICS MANAGEMENT
ST INVENTORY MANAGEMENT
AT2 Logistics in the United States Air Force
p0294 A82-27890
Logistics research program in the United States Air Force
p0511 A82-40963
Cannibalization of the F-14 and S-3A aircraft: A viable logistic
[AD-A111207] p0393 N82-24163

LONGITUDINAL STABILITY
Opportunities exist to achieve greater standardization of aircraft and helicopter seats
[AD-A111174] p0448 N82-26259
Navy’s F/A-18 expected to be an effective performer but problems still face the program
[AD-A111877] p0651 N82-26281
Allocation effectiveness of the AT-88 Bronco 2 could be improved if actions are taken now
[AD-A11878] p0652 N82-26284
Aviation Materiel Combat Readiness Evaluation (AMCRE)
[AD-A107451] p0667 N82-27283
Maintenance support resource forecasting models. Volume 2: Evaluation testing of reliability and maintenance model and expected values model
[AD-A117149] p0585 N82-32307
LONG RANGE NAVIGATION
U LOGAN
LONG RANGE WEATHER FORECASTING
Prototype Regional Observation and Forecast System (PROFS)
[AD-A111431] p0311 N82-21150
LONG TERM EFFECTS
Design technology for improved performance retention in turbofan engines
[AD-A182-24392]
Environmental exposure effects on composite materials for commercial aircraft
[AD-A1-3502]
Environmental exposure effects on composite materials for commercial aircraft
[AD-A1-1678]
LONGITUDINAL CONTROL
A decoupled control system for improved flight performance in wind shear
p0043 A82-13079
Enhanced aircraft handling qualities by longitudinal dynamics mode decoupling
p0075 A82-14826
Wind flap-type control effectiveness and effects of control hinge gap seals for a supercritical wing
[BASA-PAPER 82-0960] p0386 A82-34008
Design and analysis of a multivariable control system for a CCT-type fighter aircraft
[BASA-PAPER 82-1350] p0680 A82-39121
Design of a longitudinal ride-control system by Zaks's method of inequalities
p0518 A82-41114
System identification of the longitudinal motion of the DVLH BFB 320 research aircraft with particular consideration of control surface effectiveness
[BASA-TT-666] p020 A86-10045
Preliminary investigation into the addition of auxiliary longitudinal thrust on helicopter agility
p0249 A82-18155
Development of longitudinal equivalent system models for selected US Navy tactical aircraft
[AD-A109488] p0306 A82-20189
Prediction of aircraft handling qualities using analytical models of the human pilot
[BASA-TM-84233] p0396 N82-24280
F-15 wind-tunnel/flight correlations
[AD-A1-39121] p0495 A82-25202
Analytical and simulator study of advanced transport
[BASA-CR-3572] p0526 A82-28298
LONGITUDINAL STABILITY
A unified and generalized definition of static longitudinal stability in aircraft
p0377 A82-32135
Wind tunnel measurements of longitudinal stability and control characteristics of primary and secondary wing configurations
p0518 A82-41025
Implicit model-following technique — Application to the design of longitudinal stability augmentation systems
p0511 A82-43571
Active control elements on the transonic wing of the Airbus A-300 (ACTTA A), Airbus A-300 with reduced longitudinal stability (ACTTA-C) — advanced control transonic transport aircraft (ACTTA); design considerations
p0020 A82-10044
Analysis of a longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle
[BASA-TM-81366] p100 A82-13149
Summary of theoretical considerations and wind tunnel tests of an aerodynamic spoiler for stall proofing a general aviation airplane (NASA-CS-165100) [AD-1015260] p0057 N82-16506

Influence of structure on coefficients of longitudinal stability [NHB-FP-1125/NUP-22/2] p0319 N82-21215

Comparison of analytical predictions of longitudinal short period model-predicted oscillations with results from a milli-gram study of the space shuttle orbiter [NASA-FN-83267] p0368 N82-23236

Prediction of aircraft handling qualities using analytical models of the human pilot [NASA-FN-84233] p0396 N82-24208

Aeroplane wing [NASA-CASE-FNS-11007-1] p0451 N82-26277


A ground-motion simulation of helicopter longitudinal flying qualities for instrument approach [NASA-FN-84225] p0611 N82-33398

LOOP ANTENNAS

Calculation and measurement of electric field strength for airborne antennas in the LF/BF range [AD-1110074] p0468 N82-27275

A balanced active antenna and impulse noise blanket system for the Bendix T radio navigation receiver [NASA-FP-20463] p0542 N82-26511

The need for multivariable design and analysis techniques [NASA-CS-165100] p0029 N82-10049

Multivariable design techniques based on angular value generalizations of classical control [NASA-CS-165100] p0029 N82-10051

Limitations on achievable performance of multivariable feedback systems [NASA-CS-165100] p0029 N82-10052

LQG-based multivariable design: Frequency domain interpretation [NASA-CS-165100] p0029 N82-10053

LQG multivariable design tools [NASA-CS-165100] p0030 N82-10054

Design of high integrity multivariable control systems [NASA-CS-165100] p0030 N82-10055

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.

LOW ALTITUDE

LOMEX-20560

INCREASED PERFORMANCE OF THE LOMEX-20560 AIRCRAFT.
Inertial analyses of surface-flawed aircraft
Fatigue life of lugs under service loading — Test results and predictions
Lubrication breakdown between gear teeth
An alternate test procedure to qualify future evaluations of plasma source spectrometers for the...Development of the automated AFAPL engine simulator test for lubricant evaluation
Corrosion inhibiting engine oils
Optimization of requirements on the putting-prevention properties of turbojet-engine oils
Effects of ultra-clean and centrifugal filtration on rolling-element bearing life
A history of aircraft piston engine lubricants
Monitoring engine wear by oil analysis
Cost of ownership advantages with a shared oil system
The effect of journal misalignment on the oil-film forces generated in a squeeze-film dumper
Determination of antioxidant content in aviation oils using thin-layer chromatography
Antioxidants for synthetic oils
Corrosion inhibiting engine oils
Development of the automated AFAPL engine simulator test for lubricant evaluation
Evaluations of plasma source spectrometers for the Air Force Oil Analysis Program
An alternate test procedure to qualify future fuels for Navy aircraft
Lubrication breakdown between gear teeth
A tower approach to slant visual range observation
A history of aircraft piston engine lubricants
The history of aviation turbine lubricants
Symmetric flow characteristics of thin rectangular wings
On the performance prediction of a centrifugal compressor scaled up
On the performance prediction of a centrifugal compressor scaled up
Simulated propulsion system...on a sharp cone at Mach 3
A study of the aerodynamics of windblast effects of wing-mounted, two-dimensional, full-capture propulsion nozzles...of Mach numbers up to 2.2 of axisymmetric and nonaxisymmetric nozzles installed on an F-18 model
On the aerodynamics of windblasts...on a sharp cone at Mach 3
Mach reflections...of a shock wave from an inclined wall

A-290
and map-matching navigation

MAGNETIC COMPASSES
Low cost development of IHS sensors for expendable
BYF control and navigation
[AD-112691]

MAGNETIC COMPLX
Effects of cable geometry and aircraft attitude on
the accuracy of a magnetic leader cable system
for aircraft guidance during rollout and turnoff
[NASA-TP-1978]
p0351 H82-22239

MAGNETIC FIELD
at GEOSSAGNEST
Calculations of lightning return stroke electric
and magnetic fields above ground
[AD-11534]
p0116 H82-17714

TE/TE polarization ratios in a sample of 30 kHz
seismic at altitudes from 0 to 70 km
[DE82-0062]
p0258 H82-18466

Transient measurements under electric pulse
excitation in 37 yugmes aircraft
[TOA-C-3024-A]
p0370 H82-23409

Transverse electric waves for VLF/LF communication
between aircraft
[AD-11534]
p0596 H82-22582

MAGNETIC MATERIALS
Toroidal stiffness element based on
cobalt-samarium magnets -- for a turn and bank
indicator
[DE87-FP-8-01-01]
p0470 H82-27292

MAGNETIC MEASUREMENT
Magnetic heading reference
[NASA-CAS-12630-1]
p0448 H82-26260

MAGNETIC METALS
U MAGNETIC MATERIALS
U METALS

MAGNETIC POLES
A comparison of pole positions derived from GPS
satellite and radar navigation satellite
observations
[AD-110765]
p0449 H82-26268

MAGNETIC PROPERTIES
at GEOSSAGNEST

MAGNETIC SURVEYS
Airborne gamma-ray spectrometer and magnetometer
survey. T'ikapuk River quadrangle, Alaska,
volume 2
[DE82-00134]
p0399 H82-24620

Airborne gamma-ray spectrometer and magnetometer
survey, Janestown quadrangle, North Dakota,
volume 1
[DE82-004150]
p0399 H82-24629

Airborne gamma-ray spectrometer and magnetometer
survey, Janestown quadrangle, North Dakota,
volume 2
[DE82-004169]
p0399 H82-24630

Geophysical flight line flying and flight path
recovery utilizing the Litton LTV-76 inertial
navigation system
[DE82-005555]
p0534 H82-29292

MAGNETIC TAPE RECORDERS
U TAPE RECORDERS

MAGNETOGASDYNAMICS
U MAGNETOGASDYNAMICS

MAGNETOHYDRODYNAMICS
Effect of vacuum exhaust pressure on the
performance of RHU ducts at high D-field
[NASA-TR-22750]
p0101 H82-13908

MAGNETOMETERS
ST VARIATIONS
Airborne gamma-ray spectrometer and magnetometer
survey. T'ikapuk River quadrangle, Alaska,
volume 2
[DE82-000319]
p0399 H82-24620

Airborne gamma-ray spectrometer and magnetometer
survey, Janestown quadrangle, North Dakota,
volume 1
[DE82-004150]
p0399 H82-24629

Airborne gamma-ray spectrometer and magnetometer
survey, Janestown quadrangle, North Dakota,
volume 2
[DE82-004169]
p0399 H82-24630

Airborne gamma-ray spectrometer and magnetometer
survey, Barrow quadrangle, Alaska, volume 2
[DE82-003942]
p0413 H82-25623

MAGNETOMETRY
U MAGNETIC MEASUREMENT

MAGNETOTELLURIC PROFILING
U MAGNETIC SURVEYS
Method for refurbishing and processing parachutes [NASA-CR-4-52161] 1973 p0537 N82-29300
Composite repair system with long term latency [AD-111472] 1975 p0599 N82-32426

MAN MACHINE SYSTEMS

Improving the MLS through enhanced cockpit displays [NASA-CR-1042-1] 1975 p0009 N82-10569

Avionics implications from weapon system operational utility studies on manned air combat simulators [AHAA 81-2230] 1982 p0407 N82-13463

Have we overlooked the pilot's role in an automated flight deck [AHAA 81-2262] 1982 p0408 N82-13481

Avionics systems simulation for the four-turboprop F/A-18E aircraft [AHAA 81-2274] 1982 p0409 N82-13488

Advanced display systems for crew stations of tactical aircraft [AHAA 81-2312] 1982 p0551 N82-13514

The integration of control and display concepts for improved pilot situational awareness [AHAA 81-2312] 1982 p0601 N82-13972

The Maneuvering Flight Path Display - A flight trajectory solution display concept [AHAA 81-2312] 1982 p0607 N82-14426

Advanced cockpit for tactical aircraft [AHAA 81-2312] 1982 p0105 N82-16559

Head-up displays - The integrity of flight information [AHAA 81-2312] 1982 p0106 N82-16562

Digital test pilot concept [AHAA 81-2312] 1982 p0108 N82-17067

The NASA SST program - Developing a control concept for accurate flight planning [AHAA 81-2312] 1982 p0118 N82-17894

Flight simulation consoles, aid or obstruction - Objective evaluation of control concepts of modern flight and tactics simulators [AHAA 81-2312] 1982 p0159 N82-19269

Analysis and optimization of control systems in piloted flight vehicles — Russian book [AHAA 81-2312] 1982 p0001 N82-22398

Advanced display-control concepts for power plant operation [AHAA 81-2312] 1982 p0275 N82-26121

Flight simulators [AHAA 81-2312] 1982 p0334 N82-29928

A modern approach to pilot/vehicle analysis and the Ball-Smith criteria [AHAA 81-2312] 1982 p0489 N82-39125

Evaluation of an automatic subsystem parameter monitor --- for aircraft [AHAA 81-2312] 1982 p0502 N82-40552

Applying advanced technology to flight station design [AHAA 81-2312] 1982 p0504 N82-40887

A restrained model helicopter, which is able to fly, for investigations regarding human-multiparameter control behavior — German thesis [AHAA 81-2312] 1982 p0512 N82-40552

The aviation route forecast /ABF/ program - An interactive system for pilot self-briefing — of meteorological information [AHAA 81-2312] 1982 p0553 N82-43821

Pilots' principles still applicable — Computer monitoring of fighter aircraft emergencies [AHAA 81-2312] 1982 p0581 N82-46254

Using voice control onboard combat aircraft [AHAA 81-2312] 1982 p0692 N82-13956


Functional requirements for the man-vehicle systems research facility --- identifying and correcting human errors during flight simulation [AEAF-TR-11-412] 1975 p0352 N82-22248


Aerosatellite information data subsystems — air navigation [AEAF-TR-11-412] 1975 p0401 N82-25178

Integrated flight trajectory control [AEAF-TR-11-412] 1975 p0456 N82-26319


MAN MACHINERY SYSTEMS

Subject Index

Human factors in air traffic control [AGARD-AD-275] 1973 p0471 N82-27302

Human factors contributions to air traffic control systems --- [AGARD-AD-275] 1973 p0534 N82-29293

Human as a system component [AGARD-AD-275] 1973 p0534 N82-29295

Human capabilities and limitations in systems [AGARD-AD-275] 1973 p0534 N82-29297

Communications [AGARD-AD-275] 1973 p0534 N82-29297

Assessment of stereographies for fire control and navigation in fighter aircraft [AD-111541] 1982 p0558 N82-30306

Application of a pilot control strategy identification technique to a joint FAA/NASA ground based simulation of head up displays for CTOL aircraft [AD-111541] 1982 p0563 N82-30857

Voice Interactive Systems Technology Avionics (VISTA) Program [AD-1117280] 1982 p0608 N82-33383

MAN POWERED AIRCRAFT


MANAGEMENT

NT CONFIGURATION MANAGEMENT

NT CONTRACT MANAGEMENT

NT DATA MANAGEMENT

NT ENGINEERING MANAGEMENT

NT FINANCIAL MANAGEMENT

NT INFORMATION MANAGEMENT

NT INVENTORY CONTROLS

NT INVENTORY MANAGEMENT

NT LOGISTICS MANAGEMENT

NT PROCUREMENT MANAGEMENT

NT PROJECT MANAGEMENT

NT RESEARCH MANAGEMENT

NT RESOURCES MANAGEMENT

NT SAFETY MANAGEMENT

NT SYSTEMS MANAGEMENT

NT WEAPON SYSTEM MANAGEMENT

MANAGEMENT INFORMATION SYSTEMS

Conceptual design of an integrated power and avionics information system [NASID-11478] 1980 p072 N82-14788

National Airspace Data Interchange Network (NADIN) support of Remote Maintenance Monitoring System [NASID] 1980 p0262 N82-19160

Chief of Naval Air Training automated management information system (CAIS) user's guide [NASID] 1980 p0603 N82-33280

MANAGEMENT METHODS


A summary of the Naval Postgraduate School Research Program [AD-1104112] 1980 p102 N82-13975

Design and maintenance against corrosion of aircraft structures [NASA-CR-3534] 1980 p211 N82-17356

A system safety model for developmental aircraft programs [NASA-CR-3534] 1980 p211 N82-17356

Optimal placement model for the B-52G weapons system trainer [AD-1110177] 1980 p0457 N82-26323

MANAGEMENT PLANNING

NT PRODUCTION PLANNING

NT PROJECT PLANNING


Management of a large avionics project [AD-1113595] 1980 p105 N82-16557

Depot support of gas turbine engines [AD-1113595] 1980 p105 N82-16557

Preplanned product improvement and other modification strategies: Lessons from past aircraft modification programs [AD-1113595] 1980 p106 N82-27220
Airborne Electronic Map Systems. I - Design
Airborne Electronic Map Systems. II - Applications
Source assessment system (AD-111223)
Lorae-C plotting program for plotting lines of position on standard charts

AIRS
MT RADAR CLUTTER MAPS
MT RADAR MAPS
MT RELIEF MAPS
The electronic terrain map - A new avionics integrator
Analysis and preparation of a digital terrain data base for flight simulator use (AD-111547)

MARKET ENVIRONMENTS
Offshore uses of the airship
The airship - Its application and promotional activity

MARKS ENVIROGRAPHY
Maintenance problems in gas turbine components at the Royal Naval Aircraft Yard, Fleetlands --- helicopter and gas turbine engines

MARKS TRANSPORTATION
A marine NAVSTAR GPS receiver

MARKERS
Testing of tritium-powered runway distance and taxiway markers

MARKET RESEARCH
Public service helicopters - Is the grass greener on the other side of the fence
A perspective on civil use of GPS
Where is cobalt irreplaceable
The military helicopter market today and tomorrow
Business jets to agricultural aircraft - An overview of general aviation
Heavy-duty engine analysis, study 41 A preliminary market analysis for gas-turbine applications in the farm market

MARKETING
The marketing, organisation and financing of aeromedical evacuation by a motorised organisation
The sporty game on video body commercial airliner business history
Why GE made a norte d’evation
Airbus A 310 will compete with Boeing 767 for market

MARKOV CHAINS
Implementable differential equations for nonlinear filtering - radar tracking [W-NS-81037-0]

MARKOV PROCESSES
MT MARKOV CHAINS
Target acceleration modeling for tactical missile guidance [AIAA PAPER 82-0370]
Analysis of built-in-test accuracy

NASS
MT CENTER OF NASS

SUBJECT INDEX

Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test

BASS DISTRIBUTION
Experimental determination of parachute apparent mass and its significance in predicting dynamic stability

BASS FLOW
Accuracy expectations for gas turbine and centrifugal compressor performance testing [ASME PAPER 82-GT-128]

BASS FLOW RATE
Design and testing of a new double labyrinth seal [ASME PAPER 81-GT-68-58]

BASS SPECTROSCOPY
Control electronics for air-borne quadrupole ion mass spectrometer

BATCHING
Strong batching method for computing transonic viscous flows including wakes and separations - Lifting airfoils

MATERIAL ABSORPTION
The effects of absorbed moisture upon the physical properties of stretched acrylic materials

MATERIAL BALANCE
Balancing of flexible rotors by the complex modal method

MATERIALS
The development and applications of a full-scale wide body test article to study the behavior of interior materials during a postcrash fuel fire

MATERIALS HANDLING
Handling problems associated with jet aircraft fuels
British aerospace begins update effort [AD-AI06056]
Generation of electrostatic charge in fuel handling systems: A literature survey [AD-A106056]
Advanced internal cargo system concept demonstration and evaluation (AD-111990)

MATERIALS RECOVERY
Critical metals conservation, recycling and substitution [AGARD-R-693]

MATERIALS SCIENCE
Materials and aeronautics
New materials fly better and cheaper
Evaluation criteria for jet engine materials

MATERIALS TESTS
The possibility of using deformable rubber components in landing gear
Effects of filler materials upon radon gas erosion test apparatus
Effects of filler materials upon radon gas erosion performance at subsonic conditions
Presented are a variety of research topics in the field of mathematics and its applications. These include:

- **Mathematical Analysis**
  - Design of advanced digital flight control systems via Command Generator Tracker (CGT) synthesis methods, volume 2
  - A theoretical study of the impact of aircraft vortices on roofs in the final approach area of Dusseldorf airport

- **Mathematical Logic**
  - Mathematical model for the maintenance program of modern jet aircraft---crack detection; inspection intervals

- **Applications of Mathematics**
  - A nonlinear response analysis for coupled rotor-fuselage-nacelle-pylon configurations with powered jet exhausts
  - Dynamic control for flexible aircraft using reduced order models

- **Numerical Analysis**
  - Parametric criteria and impact on design trends

- **Mathematical Models**
  - A mathematical model of an over-sea airborne UHF radio link
  - Investigation of the structural degradation and personnel hazards resulting from helicopter composite structures exposed to fires and/or explosions

- **Aerospace Engineering**
  - Aerocoustic theory for noncompact wing-vortex interaction
  - Finite difference computation of the conical flow field over a delta wing

- **Aircraft Systems**
  - Mathematical modeling of unsteady separated flow past solid airfoil cascades
  - Investigation of the aerodynamic-contour method with control functions in the form of smooth constant-sgn contours

- **Control Theory**
  - Proportional-integral-derivative control algorithms
  - Parameter reduction by double perfect model following---with application to aircraft control

- **Turbulence and Combustion**
  - Estimation of the number of in-flight aircraft on instrument flight rules
  - Development of modern mathematical models of gas turbine engines.

- **Fluid Dynamics**
  - Vortex-induced vibrations of multiple circular cylinders
  - Parametric study of the structural dynamics and performance of high aspect ratio wings

- **Materials Science**
  - Cost model for modern jet aircraft crack detection:
  - A new approach to modeling the cost of ownership for aircraft systems

- **Probability and Statistics**
  - Probability distribution functions for aircraft systems

- **Computational Fluid Dynamics**
  - Validation studies of turbulence and combustion models for aircraft gas turbine combustors
  - Parametric study of the structural dynamics and performance of high aspect ratio wings

- **Numerical Methods**
  - A mathematical model of a subsonic transport aircraft
  - A mathematical model of a supersonic transport aircraft

- **Specialized Areas**
  - A mathematical model of a subsonic transport aircraft
  - A spark ignition model for liquid fuel sprays
  - A nonlinear response analysis for coupled rotor-fuselage systems

A comprehensive list of references and citations is included, detailing specific studies and findings in each of these areas.
MECHANICAL PROPERTIES

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS

MECHANICAL ENGINEERING

Lineup of the 18-series aircraft-derivative gas turbines

Design technology for improved performance retention in turbofan engines

Compilation of abstracts of dissertations, theses, and research papers submitted by candidates for degrees, 1 October 1979 - 30 September 1980

Bibliography of Levis Research Center technical publications announced in 1981

MECHANICAL MEASUREMENT

MECHANICAL OSCIILATORS

MECHANICAL PROPERTIES

MECHANICAL DESIGN

MECHANICAL DRIVES

MECHANICAL DEVICES

MECHANICAL DRAWINGS
A-298

AERIAL AMBULANCE SERVICE IN AUSTRALIA

FLEETING DOCTOR SERVICE IN EAST AFRICA

AIR AMBULANCE SYSTEMS IN THE REPUBLIC OF SOUTH AFRICA

THE SITUATION OF AIR RESCUE IN ARGENTINA

AEROSANICAL EVACUATION IN NEW ZEALAND

A COMPARATIVE STUDY ON MECHANICAL VIBRATION AND NOISE DURING PATIENT TRANSPORTATION

HELICOPTER SECONDARY APPLICATIONS FOR NEUROTROPHIC EMERGENCIES

PROBLEMS PERTAINING TO AEROSANICAL TECHNOLOGY IN THE CASE OF RESCUE OPERATIONS WITH HELICOPTERS IN MOUNTAINOUS AREAS

THE HELICOPTER IN RESCUE OPERATIONS IN HIGH-MOUNTAIN AREAS

AIRCRAFT FOR SECONDARY LONG RANGE EMERGENCY AMBULANCE FLIGHT

APPLICATION OF THE ABC HELICOPTER TO THE EMERGENCY MEDICAL SERVICE ROLE

THE IMPORTANCE OF A TACTICAL CARGO AIRCRAFT IN EMERGENCY RELIEF

HEMBERNAH MAMAN SE:
STRUCTURE AND VARIABILITY OF THE AKBORAS SEA FRONTAL SYSTEM
SUBJECT INDEX

Programs in protective coatings for aircraft gas turbine engines: A review of NASA sponsored research
[NASA-TP-82740] p0090 A82-12216

Electroforming of space and aircraft structures
[NASA-MSF-491-01] p0258 A82-18419

METAL CORROSION

- CORROSION
- METAL CUTTING

Tool use in cutting operations involving integral structural components in aircraft construction
[p0326 A82-28673

METAL FATIGUE

Fatigue substantiation of non-linear structures
[p0013 A82-11226

A note on fatigue aircraft accidents involving metal fatigue
[p0014 A82-11900

Crack edge instability - a criterion for safe crack propagation limit in thin sheets
[p0110 A82-17243

Methods and models for predicting fatigue crack growth under random loading - Book
[p0168 A82-20506

A crack-closure model for predicting fatigue crack growth under spectrum loading
[p0168 A82-20509

Low-frequency eddy current inspection of aircraft structure
[p0163 A82-21900

The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-rotor blades
[p0254 A82-28019

Occurrence of fretting fatigue failures in practice
[p0325 A82-28543

A review and assessment of fatigue crack growth rate relationships for metallic aircraft materials
[p0391 A82-34879

Fatigue behavior of welded joints
[p0518 A82-41115

A fatigue crack growth theory based on strain energy density factor
[p0552 A82-43742

Some case studies and the significance of fatigue thresholds - aircraft components
[p0618 A82-23561

Evaluation of cast titanium alloy compressor components, volume 1
[AD-A111431] p0371 A82-23561

Comparisons between probability of detection, sensitivity, and accuracy of five nondestructive inspection methods - high strength steel aircraft undercarriage retraction cylinders
[p0398 A82-24500

Evaluation of inelastic constitutive models for nonlinear structural analysis - for aircraft turbine engines
[NASA-TP-82845] p0398 A82-24502

METAL FILMS

High-frequency monitoring of surface layers of metals
[p0221 A82-23603

METAL FINISHING

The use of metal finishing in aircraft fuel systems
[p0088 A82-12077

METAL FOILS

Metal honeycomb to porous wireform substrate diffusion bond evaluation
[NASA-TP-82733] p0259 A82-18612

METAL FORGING

- FORGING
- FORGING TECHNIQUES
- METAL WORKING
- METAL ALLOYS
- ALKALI HALIDES
- SODIUM CHLORIDES
- METAL JOINTS
- SPOT WELDS
- WELDED JOINTS

Sheet materials - Fabrication and joining - - for gas turbine engine components
[p0325 A82-28590

Evaluation of sensitivity of ultrasonic detection of disbonds in graphite/epoxy to metal joints
[p0436 A82-37080

Selected furnace brazed components for the aerospace industry
[p0582 A82-46529

METAL PLATES

- METAL PLATE
- CHARGE COUPLED DEVICES
- CROS
- PARTICLES
- METAL POWDER
- MONITORING ENGINE WEAR BY OIL ANALYSIS
- SUPERCREST DURABILITY POWDERS BY THE ROTATING ELECTRODE PROCESS
[p0224 A82-24012

METAL SHEETS

The technology of sheet-metal stamping in the production of aircraft /2nd revised and enlarged edition/ - Russian book
[p0800 A82-14998

Crack edge instability - a criterion for safe crack propagation limit in thin sheets
[p0110 A82-17243

Prediction of cyclic growth of cracks and disbonds in aluminum sheets reinforced with boron/epoxy
[p0280 A82-27151

Sheet materials - Fabrication and joining - - for gas turbine engine components
[p0325 A82-28590

FORAMIBILITY OF METALLIC MATERIALS - 2000 A.D.; Proceedings of the Symposium, Chicago, IL, June 24, 25, 1980
[p0385 A82-33999

FORAMIBILITY OF INCOLOY ALLOY MA 956 - AN OXIDE DISPERSION STRENGTHENED STEEL ALLOY
[p0385 A82-33999

The promise of laminate metals in aircraft design
[p0506 A82-40903

METAL SURFACES

Impingement cooling of concave surfaces of turbine airfoils
[p0149 A82-10894

Gas turbine ceramic-coated-vane concept with convection-cooled porous metal core
[NASA-TP-1942] p0134 A82-23561

Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage
[MSUD-0340-O-82-02] p0527 A82-23664

METAL WHEELS

- WHEELS REINFORCEMENT
- METAL WHEELS REINFORCEMENT
- METAL WORKING
- TECHNICAL WORKING
- CLADDING
- ALUMINUM BASED COMPOSITES
- ALUMINUM ALLOYS
- WELDING TECHNIQUES
- FORGING
- FORGING TECHNIQUES
- METAL WORKING
- METAL ALLOYS
- ALKALI HALIDES
- SODIUM CHLORIDES
- METAL JOINTS
- SPOT WELDS
- WELDED JOINTS

Sheet materials - Fabrication and joining - - for gas turbine engine components
[p0325 A82-28590

Evaluation of sensitivity of ultrasonic detection of disbonds in graphite/epoxy to metal joints
[p0436 A82-37080

Selected furnace brazed components for the aerospace industry
[p0582 A82-46529

METAL WORKING

- SMELT WORKING
- METAL WORKING
- TECHNICAL WORKING
- CLADDING
- ALUMINUM BASED COMPOSITES
- ALUMINUM ALLOYS
- WELDING TECHNIQUES
- FORGING
- FORGING TECHNIQUES
- METAL WORKING
- METAL ALLOYS
- ALKALI HALIDES
- SODIUM CHLORIDES
- METAL JOINTS
- SPOT WELDS
- WELDED JOINTS

The technology of sheet-metal stamping in the production of aircraft /2nd revised and enlarged edition/ - Russian book
[p0800 A82-14998

SPP of high strength aluminum structures - superplastic forming for complex aircraft structures
[p0385 A82-33999

FORAMIBILITY OF METALLIC MATERIALS - 2000 A.D.; Proceedings of the Symposium, Chicago, IL, June 24, 25, 1980
[p0385 A82-33999

FORAMIBILITY OF INCOLOY ALLOY MA 956 - AN OXIDE DISPERSION STRENGTHENED STEEL ALLOY
[p0385 A82-33999

Net shape components for small gas turbine engines
[ASBE-17481] D0424 A82-35338

CRACK EDGE INSTABILITY - A CRITERION FOR SAFE CRACK PROPAGATION LIMIT IN THIN SHEETS
[p0110 A82-17243

OUTLINE.
SUBJECT INDEX

METALS
METAL-HEXAL BONING
Structural integrity of an adhesively bonded aircraft fuselage p0327 A82-28996

METAL-RHODIUM-DIOXIDE-SILICON
Solid-state flight accident recorder p0401 A82-25172
Solid state crash survivable flight data recorders for nship investigation p0401 A82-25173

METALLIZING
Electrical ground testing of aircraft antistatic protection p0010 A82-10822

METALLIC
MT SILICON
METALS
MT ALKALI METALS
MT ALUMINUM
MT COPPER
MT CHROMIUM
MT COBALT
MT TITANIUM
MT NICKEL
MT HES
MT TANTALUM
MT TITAN
MT VANADIUM

Strategic materials - Technological trends p0446 A82-37972
Critical metals conservation, recycling and substitution p0357 A82-22348
Research and development on rare metal analysis p0455 A82-26446
Evaluation of plasma source spectrometers for the Air Force OAI Analysis Program p0475 A82-27512

METEOROLOGY
U CRATER
U OBSCURE CONVECTION TESTS
U CRATER TESTS
U MECHANICAL PROPERTIES

METEOROLOGICAL FLIGHT
Aircraft measurements of icing in supercooled and water droplet/ice crystal clouds p0433 A82-36054

METEOROLOGICAL INSTRUMENTS
MT RAIN GAGES
MT WEATHER DATA RECORDERS
MT WIND VAMES
Instruments and installations for meteorological measurements at airports --- Russian book p0266 A82-28826
Automated Low-cost Weather Observation System (ALWOS) [AD-A1174G7] p0614 A82-33954

METEOROLOGICAL PARAMETERS
Rapid extraction of layer relative humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data p0262 A82-25113
Triggered lightning --- resulting from aircraft atmospheric electricity interactions p0432 A82-35727
Aviation meteorology --- Russian book p0430 A82-36972
Meteorological aspects of North Atlantic flight tracks - Some interim results of the study p0599 A82-43250
Aspects of clear air turbulence severity forecasting and detection p0579 A82-45823
Rotorcraft icing: Status and prospects [AD-AB-AB-166] p0036 A82-11056
Operational environment, meteorological conditions and weather forecasting p0036 A82-11057
Weather deterioration models applied to alternate airport criteria [AD-A108877] p0309 A82-20811
Meteorological impact on aviation fuel efficiency p0310 A82-21140

Meteorological inputs to advanced simulators p0303 A82-21141
Meteorology impact on future aircraft designs p0310 A82-21143

METEOROLOGICAL RADAR
Applications of conventional and Doppler radars for aviation safety p0003 A82-10215
Description of the meteorological research radar system aboard NOAA/Research Facilities Center WP-3D aircraft p0003 A82-10217
Airborne weather radar and severe weather penetration p0003 A82-10219
An airport wind shear detection and warning system using Doppler radar p0003 A82-10220
Instrumented aircraft verification of clear-air radar detection of low-level wind shear p0004 A82-10221
The evolution of airborne weather avoidance radar toward a calibrated remote rain gauge using HEACT --- Rain Echo Attenuation Compensation Hardware p0004 A82-10225
Commercial airborne weather radar technology p0075 A82-14868
X-band vs C-band aircraft radar - The relative effects of beamwidth and attenuation in severe storm situations p0165 A82-19858
Scanning strategies for air traffic control radars p0235 A82-24646
Determination of radar reflector detection and ground clutter suppression using airborne weather and mapping radar p0500 A82-40532
Development of a clear air radar to detect meteorological hazards at airports [AD-A108236] p0260 A82-18835
The Joint Airport Weather Studies Project p0311 A82-21152
Evaluation of the FAA/NWS weather data service [AD-A1146N4] p0562 A82-30800
Evaluation of a meteorological airborne pulse Doppler radar [AD-A155660] p0562 A82-30820
Considerations for optimum siting of WECHAD to detect convective phenomena hazards to terminal air navigation, part I --- meteorological radar [DOT/FRA/SD-82/35] p0956 A82-32329

METEOROLOGICAL RESEARCH AIRCRAFT
Description of the meteorological research radar system aboard NOAA/Research Facilities Center WP-3D aircraft p0003 A82-10217
Thunderstorm hazards flight research - Program overview [AIAA PAPER 81-2412] p0053 A82-13853

METEOROLOGICAL SERVICES
The Joint Airport Weather Studies project --- investigation of convective microbursts [AIAA PAPER 82-0017] p0116 A82-17734
FAA/NWS aviation route forecast (ARF) Development [AIAA PAPER 82-0013] p0183 A82-22027
Wind and temperature database for flight planning [SDE PAPER 810068] p0231 A82-24385
Airline flight planning - The weather connection [SDE PAPER 810067] p0231 A82-24386
The micro revolution comes to civil air transport

MICROPROCESSING

PMPX - The interface for engine data to AIDS --- propulsion multiplexer in aircraft Integrated

[AIAA PAPER 82-3127] p0417 82-35022

An approach to software for high integrity applications --- in aircraft gas turbine engine control

[ASME PAPER 82-05-251] p0429 82-35430

A modular automated approach to airfield weather systems

[AFSC P-2299] p0579 82-45013

Suggedized minicomputer hardware and software topics, 1981: Proceedings of the 9th BLM

[NHERP Conference] p0130 82-14829

On-board computer progress in development of a 310 flight testing program

p138 82-14833

Integration of a digital air data computer into the test aircraft HP-320

[DFMV-81-08] p0141 82-15038

Advanced recorder design and development

[FAA-D-24455] p0193 82-16385

Integration of controls and displays in U.S. Army helicopter cockpits

[AD-A105594] p0306 82-20191

Joint University Program Air for Transportation Research, 1981

[NASA-CF-2224] p0445 82-26199

PPD Programable pilot-oriented display --- air navigation

p0445 82-26201

Hydraulic Universal Display Processor System (HUDPS)

[AD-A114428] p0525 82-28294

Pilot opinion of sampling effects in lateral control

p0563 82-30949

Design of a microprocessor-controlled linkage for simulator applications

[AD-A115421] p0564 82-30956

MICROPROGRAMMING

Implementation of the recommendations made on the technical report titled analysis of advanced simulator pilot training

[AD-A106779] p0192 82-16094

MICROSCELES

U MICROBILANCES

MICROSTRIP TRANSMISSION LINES

Advanced microstrip GPS antennas developments. Volume 2: Microstrip GPS antennas for general aviation aircraft

[AD-A116260] p0477 82-27588

MICROSTRUCTURE

Mechanical and metallurgical considerations in extending the life of turbine blades

p0384 82-33585

MICROWAVE ANTENNAS

W HORN ANTENNAS

W SLOT ANTENNAS

MICROWAVE CIRCUITS

An accurate Doppler navigator with microwave simplicity

p0435 82-37037

MICROWAVE COUPLING

W T/B COUPLING CIRCUITS

MICROWAVE EQUIPMENT

W HORN ANTENNAS

W SLOT ANTENNAS

MICROWAVE RADIOMETERS

W SLOT ANTENNAS

MICROWAVE FREQUENCIES

W C BAND

W EXTREME HIGH FREQUENCIES

W SUPERHIGH FREQUENCIES

MICROWAVE LANDIG SYSTEMS

Improving the MLS through enhanced cockpit display

p0009 82-10069

Joint Tactical Microwave Landing System /JTMLS/ airborne signal processing

AN 1-302
Further application and development of an engine usage/life monitoring system for military services

Heavy lift helicopters - A national technology opportunity

LV - an advanced avionics system design

Flat panel developments for future military aircraft

Fiber-optic immunity to EMI/EMP for military aircraft

Recent improvements at the Naval Air Test Center for increased test system flexibility

Collection and simulation of spatial infrared signatures of military jet aircraft

Estimate of human control over mid-air collisions

Future directions in CFI integrated avionics

New advances in signal processing technology for integrated CFI avionics - Communication, Navigation, and Identification

Applications of covariance analysis simulation to avionics flight testing

Microprocessor flight control application study

Testing of the SJ-5A ejection seat for the F/A-18 Hornet aircraft

Craneway military passenger seat development

Head-up displays - The integrity of flight information

Type 'A' V/STOL - One aircraft for all support missions

The application of bifurcation theory to the study of loss of control over combat aircraft

Application of thrusting jet engines to tactical aircraft having vertical lift and short-field capability

Experience and needs of civil and military flight simulator users; Proceedings of the Flight Simulation Symposium, London, England, April 7, 8, 1981

The uses of airships in the Royal Navy


Design for operability of military aircraft RAP engineering experience and requirements. I - Thoughts of a squadron engineer

Aircraft operability - RAP engineering experience and requirements. II

Operability of military aircraft - Avionics design aspects

Operability of military aircraft - System design and cost trends

Flight testing in the eighties; Proceedings of the Eleventh Annual Symposium, Atlanta, GA, August 27-29, 1980

Fired gun controller design for aircraft

Transparency development needs for military aircraft in the 1980's

Aircraft transparency bird impact analysis using the NASA technology demonstration

MRC clearance of modern military aircraft
Millimeter Waves

M1183AL, VS. FROM B-18 TO F-5E
Perspectives for the use of remotely piloted vehicles in military technology
Military requirements: Too little or too much
Tethered rotorcrafts and their mission potential
V/STOL aircraft and fluid dynamics
Air Force Academy aeronautics digest: Spring/summer 1981
USAF Summer Faculty Research Program. Volume 1: 1981 research reports
USAF Summer Faculty Research Program. Volume 2: 1981 research reports
Millimeter Waves
A study of potentially low cost millimetre-wave radiometric sensors
Tracking of low-altitude targets by a combined S/X-band radar system
Mineral Exploration
Airborne gamma-ray spectrometer and magnetometer survey. Ikipulik river quadrangle, Alaska, volume 2
Airborne gamma-ray spectrometer and magnetometer survey. Janezontown quadrangle, North Dakota, volume 1
Airborne gamma-ray spectrometer and magnetometer survey. Janezontown quadrangle, North Dakota, volume 2
Airborne gamma-ray spectrometer and magnetometer survey. Barrow quadrangle, Alaska, volume 2
Mineral Oils
A history of aircraft piston engine lubricants
Minerals
FT Asbestos
Strategic materials - Technological trends
Mine excavations
Study of air compressor hazards in underground and surface mines
Mineral Electronic Equipment
A miniature electro-optical air flow sensor
Minicomputers
The use of the Weber method for microcomputer-assisted numerical analysis of airfoils
Low cost programmable multimeter facility
Potentially assessment of a parallel structure for the solution of partial differential equations
Current pressure measuring system in the transonic wind tunnel
A versatile data acquisition system for a low-speed wind tunnel
Methodology for measurement of fault latency in a digital avionics microprocessor
Minimax Technique
Feedback and minimax sensitivity
Minimization
O Optimization
Minimum Drag
Dual wing, swept forward swept rearward wing, and single wing design optimization for high performance business airplanes
Maximum induced drag of canard configurations
Missile Aircraft
Barge 2000 - Towards possible high speed production aircraft
Missile Testing of the Kuiper Airborne Observatory 91-CH telescope
Wide-angle, multiviewer, infinity display system
The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
MISSILE CASES
U Missile Bodies
Missile Control
Electro-optical vector scoring system -- for missile miss distance in fleet training exercises
Missile Bases
Northrop ECB - From B-1B to F-5E
Northrop ECM - From B-1B to F-5E
Northrop ECM - From B-1B to F-5E
Analytical determination of undercarriage retraction kinematics.

Performance evaluation of target report extractor in the monopole ACFRS --- Air Traffic Control Radar Beacon System.

Digital computer simulation of modern aeronautical digital communication systems.

A method to determine runway capacity.

Study of ground handling characteristics of a maritime patrol aircraft.

Preliminary study of ground handling characteristics of Buoyant Quad Rotor (BQR) vehicles.

A technique to determine lift and drag polars in flight and their application.

Human response to fire.

Cost efficiency versus objective fidelity in flight simulation.

Aerial combat simulation in the U.S. Air Force.

Visual technology research simulator, visual and motion system dynamics.

Motion stability.

Terrain model animation.

Aerial combat simulation in the U.S. Air Force.

Visual technology research simulator, visual and motion system dynamics.

Motion simulator.

Motion stability.

Motion pictures.

Motion simulator.

Motion stability.

Motion pictures.

Motion simulator.

Motion stability.

Motion pictures.

Motion simulator.

Motion stability.
NAVIER-STOKES EQUATION

The numerical solution of the Navier-Stokes equations is a fundamental problem in computational aerodynamics. These equations describe the unsteady motion of fluid substances. The Navier-Stokes equations are based on the conservation of momentum and are applicable to both compressible and incompressible fluids. Solving these equations numerically is crucial for predicting flows in complex geometries, such as around aircraft, ships, and other vehicles.

In the context of computational aerodynamics, the Navier-Stokes equations are typically solved using numerical methods. These methods include finite difference, finite volume, and finite element approaches. Each method has its own advantages and disadvantages, depending on the specific problem being solved.

The Navier-Stokes equations are often used in conjunction with other equations, such as the Euler equations, which are a simplified version of the Navier-Stokes equations. These equations are essential for understanding and predicting the behavior of fluids in various applications, from aircraft design to weather forecasting.

Numerical solutions of the Navier-Stokes equations are also used in the design and optimization of aircraft and ships. By simulating flow around different geometries, engineers can determine the most efficient shapes and configurations for these vehicles.

In summary, the Navier-Stokes equations are a cornerstone of computational aerodynamics, enabling the prediction of fluid flows in complex scenarios. This knowledge is crucial for the design and optimization of aircraft, ships, and other vehicles, as well as for a wide range of other applications involving fluid dynamics.
On the generation of side-edge flap noise
A comprehensive bibliography of literature on helicopter noise technology
[AD-A103311]
Some applications of Hartmann-type sources in aircraft noise research - airframe shielding
[EAT-TR-ABCD-1877]
Generation of noise by turbulence
(OEBA-P-218053)
Aeronas sound from corner flow and flap flow
[AIR-CA-166396]

NOISE INTENSITY
Quantification of airport community noise impact in terms of noise levels, population density, and human subjective response
p0129 AB2-18732
Comparison of aircraft and ground vehicle noise levels in front and backyards of residences
p0166 AB2-20058
Preliminary thoughts on helicopter cabin noise prediction methods
p0288 AB2-19148
Field studies of the Air Force procedures for measuring community noise exposure from aircraft operations
[AD-A113672]
p0530 AB2-28041
Airplane noise
p0564 AB2-30781

NOISE MEASUREMENT
Model helicopter rotor impulsive noise
p0013 AB2-11303
Noise control measures in the new Singapore International Airport
p0107 AB2-16746
The effect of non-linear propagation in jet noise
[AIAA PAPER 82-0416]
p0121 AB2-17936
Noise monitoring in airport communities
p0129 AB2-18731
Ground reflection effects in aircraft noise measurements
p0166 AB2-19970
Mean flight and noise measurements in a Bach J.5 propeller quiet test model
[AIAA 82-0569]
p0236 AB2-24657
Exterior noise on the fuselage of light propeller driven aircraft in flight
p0581 AB2-46118
SEL and SFLW noise exposure coefficients for the 747 and T-38 aircraft
[AISA-TA-83214]
p0042 AB2-11800
Noise of the SB-3 propeller model at 2 deg and 4 deg angle of attack
[AISA-TA-82728]
p0194 AB2-16808
Effect of facility variation on the acoustic characteristics of three single source impulsive sounds
[AISA-TA-81635]
p0270 AB2-15994
Computer-program model for predicting horizontally and vertically polarized radio atmospheric radio noise at elevated receivers
[AD-A10944B]
p0307 AB2-20380
TP 12 in-duct combustor noise measurements with a turbine nozzle, volume 1
[AISA-CB-165562-VOl-1]
p0309 AB2-21031
TP 12 in-duct combustor noise measurements with a
- turbine nozzle, volume 2
[AISA-CB-165566-VOl-2]
p0309 AB2-21031
TP 12 in-duct combustor noise measurements with a
- turbine nozzle, volume 3
[AISA-CB-165566-VOl-3]
p0309 AB2-21033
Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations
[AISA-TA-86746]
p0358 AB2-22947
A preliminary comparison between the SB-3 propeller noise in flight and in a wind tunnel
[AISA-TA-82805]
p0359 AB2-22955
Program for narrow-band analysis of aircraft
[AISA-CB-165803]
p0358 AB2-22947
Flapover noise using ensemble averaging techniques
[AISA-CB-165856]
p0359 AB2-22955
Recommendations for field measurements of aircraft noise
[AISA-CB-3540]
p0359 AB2-22955

An investigation of rotor harmonic noise by the use of small scale wind tunnel models
[NASA-CB-166397]
p0371 AB2-24050
Field studies of the Air Force procedures for measuring community noise exposure from aircraft operations
[AD-A113672]
p0530 AB2-28041
Use of the cavitation tunnel at the Dutch Naval Experiment station (NSP), Wageningen for the determination of the acoustic source strength of a propeller cariavation
[TP-900-720]
p0530 AB2-29116
Estimated airplane noise levels in a weighed decibel
[AC-36-36]
p0580 AB2-30029
Forward velocity effects on fans noise and the suppression characteristics of advanced inlets as measured in the NASA-1550 by 60 foot wind tunnel
[HASA-CB-152328]
p0580 AB2-30029
USAF Bioenvironmental Noise Data Handbook. Volume 1, T-37B in-flight crew noise
[AD-114943]
p0580 AB2-30131
Par-field acoustic data for the Texas A&M, Inc.
[AD-111564]
p0580 AB2-30132
Rating of airport technology needs
[AD-A116132]
p0565 AB2-31073
USAF Bioenvironmental Noise Data Handbook, volume 1
[AC-746]
p0565 AB2-31073
Study of the source function by the causality methods defined by Bibner and Siddon
[PB82-205710]
p0565 AB2-31074

NOISE POLLUTION
Costs of noise nuisance from aircraft
p0046 AB2-12334
Noise monitoring in airport communities
p0069 AB2-40051
Quantification of airport community noise impact in terms of noise levels, population density, and human subjective response
p0129 AB2-18731
Direct comparison of community response to road traffic noise and to aircraft noise
p0218 AB2-22974
The impact and future direction of aircraft noise certification
p0296 AB2-28150
Noise pollution and airport regulation
p0296 AB2-40051
O'Hare International Airport - Improvises to proposed state efforts to limit airport noise
p0496 AB2-40051
The determination of the duration of an exposure to aircraft noise - - German thesis
p0578 AB2-45221
A comprehensive bibliography of literature on helicopter noise technology
[AD-A103311]
p0301 AB2-10681
Effects of aircraft noise on the equilibrium of aircraft residents: Testing and utilization of a new methodology
[ASA-TA-76626]
p0042 AB2-11636
Effects of aircraft noise on the equilibrium of aircraft residents: Supplementary analyses to the study carried out around Oly
[ASA-TA-76627]
p0137 AB2-14673
Taking into account nighttime annoyance in the calculation of the psophic index
[ASA-TA-76580]
p0137 AB2-14674
Noise impact on communities from aircraft
[GPO-60-617]
p0215 AB2-17655
Assessment of community response to high-energy impulsive sounds
[AD-110110]
p0322 AB2-21777
Transportation noise, its impact, planning and regulation
[S-258]
p0478 AB2-21557
A study of general aviation community noise impact
[ASA-TH-76350]
p0137 AB2-14673
Carbon monoxide
[ASA-CP-2241]
p0564 AB2-31070
Community noise
[ASA-CP-2241]
p0564 AB2-31070

SUBJECT INDEX
NOISE POLLUTION
-1-315

Current investigations regarding noise research in the Braunschweig Center of the German Institute for Research and Experimentation in Aeronautics and Astronautics.

Screech suppression in supersonic jets

Enhanced noise immunity and error control in a fully integrated JPS/UPS receiver --- Joint Tactical Information Distribution System.

"Integral Noise": An automatic calculation model for the prediction and control of fixed-wing aircraft noise. I - General considerations, theoretical bases and model analysis.

Noise-Con 81; Proceedings of the National Conference on Noise Control Engineering, North Carolina State University, Raleigh, NC, June 8-10, 1981.

Reduction of the acoustic environment in an F100-PW-100 engine test cell.

Development of a transmission loss test facility for light aircraft structures.

Noise control plan for a new airplane manufacturing facility.

Sanctuary radar --- digital processor for Doppler filtering and pulse compression.

Design requirements for modern rescue helicopters.

Comparison of aircraft and ground vehicle noise levels in front and backyards of residences.

Methodology for multispectral minimum noise impact landing trajectories.

Transparency development needs for military aircraft in the 1980's.

Auxiliary hub electromagnetic signature reduction.

The impact and future direction of aircraft noise certification.

Interior noise considerations for advanced high-speed turboprop aircraft.

Model test and full scale checkout of dry-cooled jet runup sound suppressors.

Fixed pattern noise correction for staring arrays in guidance systems.

NASA research in supersonic propulsion: A decade of progress.

Predesign study for an advanced flight research rotor.

Demonstration of radar reflector detection and ground clutter suppression using airborne weather and mapping radar.

Airbus scatter design for fan noise suppression in two-dimensional ducts.

Airbus industry and community noise.

Airplane noise reduction --- Boeing 747 series.

Experimental modal analysis of the fuselage panels of an Aero Commander aircraft.

Comparative study of flare control laws.

A comprehensive bibliography of literature on helicopter noise technology.

Analysis of integrated fuel-efficient, low-noise procedures in terminal-area operations.

NASA research activities in aeropropulsion.

Multiple pure tone elimination strut assembly --- our breathing engines.

Blade planform for a quiet helicopter.


The measurement of the mobility of structures at acoustic frequencies.

Study of cabin noise control for twin engine general aviation aircraft.

Optimal aircraft landing patterns for manual noise impact.

Acoustic measurements of F100-PW-100 engine operating in hush house BSN 4920-02-070-2721.

An experimental study of the effects of an inlet flow conditioner on the noise of a low speed axial flow fan --- an in an aircraft engine.

Acoustic measurements of F-4E aircraft operating in hush house, BSN 4920-02-070-2721.

Acoustic measurements of F-16 aircraft operating in hush house, BSN 4920-02-070-2721.

Developments to improve the noise and combustion emissions on the Fokker F28 aircraft and its Rolls-Royce RB161-55 engines. Section 1: Development of the new internal 10-Lobe mixer.

The roles force role in aircraft noise reduction --- jet engines, acoustic lining.

The impact and future direction of aircraft noise certification.

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned admittance concept.

Airbus industry and noise in the community.

Aeroacoustic performance of an externally blown flap configuration with several flap nose suppression devices.

Development of an analytical technique for the optimization of jet engine and duct acoustic liners.

NASA research in supersonic propulsion: A decade of progress.

A research program to reduce interior noise in general aviation airplanes. Influence of depressuration and damping material on the noise reduction characteristics of flat and curved stiffened panels.

NASA research in supersonic propulsion: A decade of progress.

A research program to reduce interior noise in general aviation airplanes. Influence of depressuration and damping material on the noise reduction characteristics of flat and curved stiffened panels.

Marine Air Traffic Control and Landing System.

Aircraft noise reduction.

QCSSE under-the-wing engine acoustic data.

Airbus industry and community noise.

Static noise tests on modified augmentor wing jet S2OL research aircraft.

The effect of barriers on wave propagation phenomena: With application for aircraft noise shielding.

The cost of noise reduction for departure and arrival operations of commercial tilt rotor.
SUBJECT INDEX

NONLINEAR PROGRAMMING
Optimization of propeller blade shape by an analytical method
[AIAA PAPER 82-1125] p0417 A82-35021

NONLINEAR SYSTEMS
Fatigue substantiation of non-linear structures
[p0113 A82-11224]
The design of exact nonlinear model followers - application to trajectory autopilot for helicopter
[p004a A82-13125]
An approach to robust nonlinear control design - with illustration of S-85 turbojet engine simulation
[p004a A82-13126]
Application of the concept of dynamic trim control and nonlinear system inverses to automatic control of a vertical attitude takeoff and landing aircraft
[AIAA 81-2238] p0047 A82-13466
Integrated flight testing based on nonlinear system identification data processing techniques
[AIAA PAPER 81-2499] p0064 A82-14389
Describing function analysis of nonlinear nose gear shocks
[AESE PAPER 81-W/ASC-20] p0234 A82-24565
Fluctuator analysis using nonlinear aerodynamic forces
[AIAA 82-7226] p0042 A82-30176
A nonlinear response analysis for coupled rotor-fuselage systems
[AESE PREPRINT 81-24] p0441 A82-37794
An analysis of nonlinear instability in the implementation of a VUT control system during hover
[AIAA 82-1611] p0045 A82-38990
Theoretical and experimental investigation of some nose chord characteristics of electrolytic nolwvlaves --- German thesis
[p0552 A82-43660]
A geometric approach to multivariable control system synthesis
[p0030 WH-2-10056]
Theory of stochastic optimal control some basic notions
[p0036 WH-2-11075]
Application of nonlinear systems to automatic flight control design: System concepts and flight evaluations
[p0039 WH-2-11083]
Analysis of a nonlinear attitude tracking method
[AIAA 81-0278] p0263 WH-2-19197
Application of the theory of bifurcations to the study of the loss of control in combat aircraft
[p0397 WH-2-22198]
An analysis of nonlinear instability in the implementation of a VUT control system during hover
The determination of critical flutter conditions of nonlinear systems
Nonlinear structural and life analyses of a combustor liner
Notes on lateral-directional pilot induced oscillations
[AD-1113996] p0274 WH-2-27322
The determination of gust loads on nonlinear aircraft using a power spectral density approach
[AER-22-80123-U] p0556 WH-2-28303
System identification of nonlinear aerodynamic models
[p0540 WH-2-24501]
Applications to aeronautics of the theory of transformations of nonlinear systems
Modeling of a tracking radar in terms of a nonlinear second order phase loop lock
[AD-1115628] p0596 WH-2-32580
NONLINEARITY
Linear and nonlinear analysis of vortex whistle: Another blade buster
[p0144 WH-2-15067]
The effects of slight non linearities on modal testing of helicopter-like structures
[p0248 WH-2-18310]
Quantization of the proportional navigation problem
[AD-111669] p0468 WH-2-27273

NONREFLECTION
U ENERGY ABSORPTION
NONRECOVERY
U FLEXIBILITY
NONREPRODUCIBLE FLOW
Recent improvements in prediction techniques for supersonic weapon separation
[AIAA PAPER 82-0170] p0116 A82-17830
Allowance for flow nonuniformity in the minimum section in the optimal contouring of the expanding part of a nozzle
[p0274 WH-2-25798]
Effect of fuel-air-ratio nonuniformity on emissions of nitrogen oxides
[AIAA-TF-1798] p0099 WH-2-13143
Research on jet engine rotor-stator aerodynamic interaction and rotor negative incidence stall
[AD-110341] p0318 WH-2-21203
Rough analysis of installation effects on supersonic nozzle flow
Comparison of three-dimensional unsteady nonuniform flow in the blade-free annular channel of a turbomachine --- military aircraft, turbocompressors

NONREVERSIBLE FLOW
U INVISCID FLOW
NON REVERSIBILITY
U INVERSE DISTRIBUTION
NORMAL FORCE DISTRIBUTION
U FORCE DISTRIBUTION
NORMAL SHOCK WAVES
An inviscid-velocity interaction treatment to predict the blade-to-blade performance of axial compressor with leading edge normal shock waves
[AESE PAPER 82-02-125] p0525 WH-2-35363

NORTH AMERICAN AIRCRAFT
NT B-1 AIRCRAFT
NT B-70 AIRCRAFT
NT F-10 AIRCRAFT
NT T-2 AIRCRAFT

NORTH DAKOTA
Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 1
[DE82-004169] p0399 WH-2-24629
Airborne gamma-ray spectrometer and magnetometer survey. Jamestown quadrangle, North Dakota, volume 2
[DE82-004169] p0399 WH-2-24630

NORTHERN HEMISPHERE
U ARCTIC REGIONS

NOTHER THORPE AIRCRAFT
NT F-5 AIRCRAFT
NT F-18 AIRCRAFT
NT T-38 AIRCRAFT

NOSE INLETS
Thrust modulation methods for a subsonic V/STOL aircraft
[AIAA PAPER 82-02-747] p0098 WH-2-13112

NOSE TIPS
Analysis and wind tunnel tests of a probe used to sense altitude through measurement of static pressure
[AIAA PAPER 82-1361] p0400 WH-2-39128
Development and laboratory testing of a thermal emission velocimeter for application to an erosion nose tip test facility
[AD-1107713] p0213 WH-2-17482
Comparison of numerical results and measured data for smooth and indented nosetips
[AD-1117798] p0460 WH-2-26619

NOSE WHEELS
Describing function analysis of nonlinear nose gear shakiness
Electro-hydraulic nose wheel steering of the Transall C22
[p0389 WH-2-34373]
Hydraulic nose gear shaker analysis
[AD-111492] p0607 WH-2-25274

NOSES (FOBEBODIES)
P-5 Shark Nose Badges - A development overview
[p0281 WH-2-26470]
Corporate flight test nose for Nomad R22 aircraft
[AER-0066-78] p0670 WH-2-27289

A-319
Aerodynamic interactions with turbulent jet exhaust plumes

A-320

An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters

Heat transfer from nozzles under the conditions of flow laminarization

Effects of installation of F101 DFE exhaust nozzles on the afterbody-nozzle characteristics of the P-14 airplane

Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing

Some aspects of jet dynamics and their implications for VTOL research

An experimental study of rectangular and circular thrust augmenting ejectors

Hypersonic geometry

A summary of VTOL inlet analysis methods

Ground test of a large scale 'D' vented thrust deflecting nozzle

Screech suppression in supersonic jets

Allowance for flow nonuniformity in the expansion part of a nozzle

Transonic wind tunnel test of a supersonic nozzle installation

An experimental study of flow rate and thrust characteristics of a four-nozzle ejector with flow twist

The subsonic performance of practical military variable area convergent nozzles

Tests of a D vented thrust deflecting nozzle behind a simulated turbofan engine

Effect of facility variation on the acoustic characteristics of three single stream nozzles

Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing

Aerodynamic analysis of VTOL inlets and definition of a short, blowing-lip inlet

Experimental study of a jet deflector

An experimental study of rectangular and circular thrust augmenting ejectors

A summary of VTOL inlet analysis methods

Aeropropulsive characteristics of F-18 exhaust nozzles installed on an F-18 model

Effect of nozzle and vertical-tail variables on aeropropulsive characteristics of Hach numbers up to 16 foot transonic tunnel

Ground test of a large scale 'D' vented thrust deflecting nozzle

Integration of advanced exhaust nozzles

Expansion-ramp nozzles with thrust vectoring and reversing

Tests of a D vented thrust deflecting nozzle behind a simulated turbofan engine

Experimental investigation of the powered low-speed longitudinal aerodynamics of the vectored-engine-over (VEO) wing fighter configuration

Developments in boundary layer Thrust Vector Control

Triplication of existing computer generated color graphic techniques to the processing and display of subsonic crossflow

Allowance for flow nonuniformity in the minimum expansion-ramp section in the optimal contouring of the nozzle behind a simulated turbofan engine

Some aspects of jet dynamics and their implications for VTOL research

An experimental study of a jet deflector

A summary of VTOL inlet analysis methods

Expansive characteristics of F-18 exhaust nozzles installed on an F-18 model

Effect of nozzle and vertical-tail variables on aeropropulsive characteristics of Hach numbers up to 2.2 of axisymmetric and nonaxisymmetric nozzles installed on an F-18 model

Effect of nozzle and vertical-tail variables on the performance of a 3-surface P-15 model at transonic Mach numbers — Langley 16 foot transonic tunnel

Failure analyses of silica phenolic nozzle liners

Hypersonic thrust coefficients

The design of compact asymmetric maximum-thrust nozzles for a given lift force

Thrust modulation methods for a subsonic VTOL aircraft

Tests of a D vented thrust deflecting nozzle behind a simulated turbofan engine

Wind tunnel investigation of the powered low-speed longitudinal aerodynamics of the vectored-engine-over (VEO) wing fighter configuration

A summary of VTOL inlet analysis methods
SUBJECT INDEX

(HASA-TH-83263) [p0349 A82-22207]

NOZZLES
Development of improved high temperature coatings for HW-792 + BT [HASA-CN-16395] [p0136 A82-18333]
Tests and analysis of a vented D thrust deflecting nozzle on a turboshaft engine --- conducted at the outdoor aerodynamic research facility of the Ames Research Center [HASA-CN-164279] [p0301 A82-20143]

NUCLEAR AUXILIARY POWER UNITS
BT SNAP
NUCLEAR ELECTRIC POWER GENERATION
BT NUOCLAR PLANTS
BT SNAP
NUCLEAR PARTICLES
BT ALPHA PARTICLES
BT PROTONS
NUCLEAR POWER PLANTS
Advanced display-control concepts for power plant operation [p0275 A82-26121]

NUCLEAR PROPELLED AIRCRAFT
Very large aircraft with alternate fuels - L82 [p0376 A82-31986]
NUCLEAR PROPULSION
The feasibility of a high-altitude aircraft platform with consideration of technological and societal constraints [HASA-TH-84508] [p0535 A82-29313]

NUCLEAR RADIATION
Effects of lightning and nuclear electromagnetic pulse on an advanced composite aircraft [p0288 A82-27144]

NUCLEAR REACTIONS
BT POSITION AMPLIFICATION
NUCLEAR WASTES
G RADIOACTIVE WASTES
NUCII (NUCLEAR PHYSICS)
BT ALPHA PARTICLES
BT PROTONS
NUCLEAR REACTIONS
BT FLOATING POINT ARITHMETIC

NUMERICAL ANALYSIS
BT APPROXIMATION
BT COMPUTATIONAL FLUID DYNAMICS
BT ERROR ANALYSIS
BT FINITE DIFFERENCE THEORY
BT FINITE ELEMENT METHOD
BT FINITE VOLUME METHOD
BT INTERPOLATION
BT ITERATION
BT ITERATIVE SOLUTION
BT LEAST SQUARES METHOD
BT MONTE CARLO METHOD
BT MONOGRAPHS
BT NUMERICAL INTEGRATION
BT PADE APPROXIMATION
BT RELAXATION METHOD (MATHEMATICS)
BT BUNGE-KUTTA METHOD
The use of the Weber method for minicomputer-assisted numerical analysis of airfoils [p0005 A82-10362]
Numerical treatment of helicopter rotor stability problems [p0019 A82-12045]
Procedures and analysis techniques for determining static air masses control speeds [p0021 A82-12654]
Air-to-air combat analysis - Review of differential-gaming approaches [p0084 A82-13115]
Numerical computation of optimal atmospheric trajectories involving staged vehicles [HASSA-PAPER 82-0360] [p0119 A82-17920]
A unified and generalized definition of static longitudinal stability in aircraft [p0377 A82-32135]
Trends in structural analysis at ONERA [OHEBA, TP NO. 1962-2] [p0359 A82-34941]
Numerical methods for solving boundary value problems for noncavitating and cavitating flow past wing profiles [p0483 A82-39722]

BUILT-IN CONTROL
The need for multivariable design and analysis techniques [p0029 A82-10049]
Lifting surface theory for wings in low frequency small amplitude yawing and side slipping oscillating motions at low speeds [p0131 A82-14061]
Results of calculations [p0206 A82-17198]
The through flow calculations [p0206 A82-17199]
A complete method for computation of blade node characteristics and responses in forward flight [p0245 A82-18126]
Comparison of numerical results and measured data for smooth and indented noses [AD-A111794] [p0460 A82-26619]

NUMERICAL CONTROL
Parallel processing applied to digital flight control systems - Some perspectives [p0073 A82-14794]
Microprocessor flight control application study [p0073 A82-14796]
Graphics in numerical control - The user's challenge [p0167 A82-20277]
Propulsion system controls design and simulation [HASSA-PAPER 82-0322] [p0185 A82-22091]
A computer-controlled oscillation mechanism for unsteady aerodynamics experiments [p0328 A82-29016]
Test demonstration of digital control of wing/store flutter [A82-06405] [p0337 A82-30141]
Automatic checking of measuring units in the Meso winds tunnels [OHEBA, TP NO. 1962-10] [p0390 A82-36498]
Integrated aircraft avionics and powerplant control and management systems [HASSA-PAPER 82-07-165] [p0426 A82-35365]
Adaptive fuel control feasibility investigation for helicopter applications [HASSA-PAPER 82-07-205] [p0427 A82-35400]
The computerized cockpit for the one-man crew [p0434 A82-36397]
The DRAFPO system - Materials means and logic functions [p0437 A82-37521]
Traffic flow control in the Frankfurt/Main airport area [p0437 A82-37526]
An automatic map reader suitable for use in helicopters [p0441 A82-37775]
Design and flight testing of digital direct side-force control laws [A82-1521] [p0484 A82-38941]
Digital full authority controls for helicopter engines [p0499 A82-40522]
Design and flight testing of a digital optimal control general aviation autopilot [p0507 A82-40906]
Programmable controller system for wind tunnel diversion valves [p0543 A82-41846]
Automated flight data processing [p0554 A82-44222]
The flight management computer [PAPER 811762] [p0555 A82-46233]
Pratt's principles still applicable - Computer monitoring of fighter aircraft emergencies [p0581 A82-46254]
Automation in the skies --- automatic air traffic control [p0581 A82-46254]
The Modular Automated Weather System (MAWS) concept --- airfield weather support [p0137 A82-16763]
Distributed intelligence for air fleet control (AD-AI08611) [p0253 A82-18195]
Software features applicable to inertial measurement unit self alignment (AD-AI08511) [p0253 A82-18196]
Air traffic control en route computer modernization (GO-02-773) [p0303 A82-20167]
FAA air traffic control computer modernization (GO-02-375) [p0303 A82-20168]
Advanced aircraft electronic systems control technology demonstrator. Phase 1: Analysis and [p0483 A82-39722]
Numerical flow visualization

- Preliminary design [AD-A113633]
- Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles
- Numerical solution of Space Shuttle Orbiter flow field
  [AIAA Paper 82-0028] p0286 A82-27083
- Application of computer generated color graphic techniques to the processing and display of three-dimensional fluid dynamic data
  [AIAA Paper 82-0935] p0373 A82-31922
- Mathematical modeling of unsteady separated flow past solid airfoil cascades [AIAA Paper 82-32801]
- Turbulence modeling - report of a working party [NASA-TB-83236] p0252 A82-18160
- Numerical calculation of the flow in compressor and turbine cascades [German thesis]
- A numerical three-dimensional turbulent simulation of a subsonic VTEC jet in a cross-flow using a finite element algorithm [AD-A104541]
- The numerical solution of incompressible turbulent flow over airfoils [NASA-TM-82-11055]
- The problem of calculation of the flow around helicopter rotor blade tips
- Separated flow around helicopter bodies [NASA-TM-82-26311]
- Current status of inlet flow prediction methods [AD-A111705]
- Simulation of the fluctuating field of a forced jet [NASA-TM-82-05066]
- Workshop on mesh generation
- A Schwarz-Christoffel method for generating internal flow grids
- Application of integration algorithms in a parallel processing environment for the simulation of jet engines
- Numerical applications of the physical optics approach for the calculation of radar cross sections of convex perfect scatterers [NASA-TR-82-261]

NOSA BEINGS

U Poliaard's BEINGS

Nyquist diagram
- Characteristic and principal gains and phases and their use as a multivariable control design tool
- Generalizing Nyquist and root-locus diagram techniques [AIAA Paper 82-10050]

Oblique wing aircraft program [AIAA Paper 81-2354] p0064 A82-14390
- Unique flight characteristics of the A/D-1 oblique-wing research airplane [AIAA Paper 82-1329] p0468 A82-39106
- Observability (systems)
- The use of observers on relaxed static stability aircraft [NASA-TM-82-18183]
- Instrument failure detection in partially observable systems [NASA-TM-82-17037]
- Flight control synthesis using robust output observers [AIAA Paper 82-1575] p0468 A82-39106
- Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn [AIAA Paper 82-47093]

Observation

- MT EARTH OBSERVATIONS (FROM SPACE)
- MT SATELLITE OBSERVATION

Observation aircraft

- MT F-5 AIRCRAFT
- MT VIKING AIRCRAFT
- MT 0-2 AIRCRAFT

Obstacle avoidance

- Techniques for overhead wire detection
- A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes [NASA-TM-82-26385]
- Integrated navigation-TF/TA-system based on stored terrain data processing [NASA-TM-82-22183]
- Terrain following/terrain avoidance system concept development [NASA-TM-82-33163]

OceanoBricating

Ocean data acquisitions systems

- Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft [NASA-TM-82-26493]
- A comparison of Seasat-derived wave height with surface data [NASA-TM-82-26494]

Ocean data platforms

- Ocean data acquisition systems [NASA-TM-82-26495]
- Ocean data stations
- Ocean data acquisitions systems

Ocean surfaces

- Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft [NASA-TM-82-26493]

OceanoBographic parameters

- Structure and variability of the Alboran Sea frontal system
- A comparison of Seasat-derived wave height with surface data
- United States coast pilot 9. Pacific and Arctic Coasts Alaska: Cape Spencer to Beaufort Sea [PB82-109562]
- Overwater approaches

Oceanography

- A summary of the Naval postgraduate school research program [NASA-TR-82-13975]
- Oceans

AT ATLANTIC OCEAN

ODAS

U Ocean data acquisitions systems

Offshore energy sources

- Flight evaluation of low-C as a helicopter navigation aid in the Baltimore Canyon oil exploration area [AD-A105260]
- Offshore platforms
- The case for helicopter boating [AIAA Paper 82-20467]
- Real-time simulation of an airborne radar for overwater approaches [NASA-CR-162293]

OPTS

- U Space transportation system flights
- Oceanographic
- U Variable sweep wings

OH-13 helicopter

Evolution of the Aerocast [NASA-TM-82-10050]

OH-58 helicopter

- Composite main rotor hubble barded [AD-A113633]
- Design of a composite main rotor blade spar for fabrication by braiding [NASA-TM-82-26265]
- Airworthiness and flight characteristics of an OH-58C configured to a Light Coahel Helicopter (LCH) [AD-A113633]

Oil additiveS

- Optimization of requirements on the pitting-prevention properties of turbojet-engine oils
OPERATING SYSTEMS (COMPUTERS)

Restoration of performance, Models 727, 737, and 747
[SAE PAPER 81-0171] p0233 882-24066
Aircraft/airport compatibility - A constant challenge for aircraft designers
p0263 A82-25119
Some thoughts on design optimization of transport helicopters
p0273 A82-25771
Accurate and fast flight simulation consoles, aid or obstruction - The 24-hour flight
p0490 A82-39247
Advanced technologies applied to reduce the operating costs of small commuter transport
p0508 A82-40915
Aircraft BDS in Europe - A perspective view
p0508 A82-42544
A new approach to modeling the cost of ownership for aircraft systems
[AD-A108436] p0102 A82-13979
Use of optimization to predict the effect of selected parameters on aircraft performance
[NASA-CR-168439] p0201 A82-17151
An airline view of the corrosion problem
p0211 A82-17352
A parametric study of the influence of the engine upon the operating cost of a civilian aircraft
p0246 A82-18131
Parametric criteria and impact on design trends
p0267 A82-18139
Potential reductions in aircraft operation and maintenance costs by using thrust computing
[AD-A108467] p0254 A82-18207
Use of optimization to predict the effect of selected parameters on commuter aircraft performance
[NASA-CR-169027] p0451 A82-26279
OPERATING SYSTEMS (COMPUTERS)

Research through simulation -- simulators and research applications at Langley
[NASA-PACTS-125] p0192 A82-16092
Air traffic control on route computer system
[ACRO-89-008] p0264 A82-19202
An assessment of the real-time application capabilities of the SIFT computer system
[NASA-TB-64462] p0413 A82-25811
The Flight Service Automation System (FSAS) system benchmark. Volume 1: Summary, introduction and concepts
[PHR-12-14358] p0468 A82-27277
The Flight Service Automation System (FSAS) system benchmark. Volume 2: The model of the application
[PHR-12-143546] p0468 A82-27278
The Flight Service Automation System (FSAS) system benchmark. Volume 3: The vendor interface package
[PHR-12-143553] p0468 A82-27279
OPERATING TEMPERATURE

The operational characteristics of turbosets, giving particular attention to the cooled high-pressure turbine
p0005 A82-14414
OPERATIONS RESEARCH

MT LINEAR PROGRAMMING
MT MATHEMATICAL PROGRAMMING
MT NONLINEAR PROGRAMMING
MT QUADRATIC PROGRAMMING

OPERATOR PERFORMANCE

Flight simulation consoles, aid or obstruction - Objective evaluation of control consoles of modern flight and tactics simulators
[DATA PAPER 81-007] p0159 A82-19269
Reducing reflections on the front surface of air traffic control displays
p0219 A82-23319
OPERATORS (PERSONNEL)

MT AIRCRAFT PILOTS
MT PILOTS (PERSONNEL)
MT TEST PILOTS

Accident prevention - A regulator's view
p0110 A82-17278
Predicting the application of vicarious liability to fixed base operators - Still guesswork after all these years
p0377 A82-32056
SUBJECT INDEX

Task analytic techniques: Application to the design of a flight simulator instructor/operator console
[AD-A108724] p0257 A82-18227
A theory of Laser error
[NASA-CE-16613] p0352 A82-22250
OPTICAL ABSORPTION

U LIGHT TRANSMISSION

OPTICAL COMMUNICATIONS

Light-guided information distribution systems
[AAV 81-2230] p0051 A82-13519
Laser communications via an atmospheric link
p0175 A82-20615
Airborne Flight Test System (AFTS)
[AD-A115108] p0589 A82-32354
OPTICAL DATA PROCESSING

MT SCENE ANALYSIS

FILE-1B aircraft flight test program --- Feature Identification and Location Experiment
[AAE 81-001] p0105 A82-16335
Optical Information Processing for Aerospace Applications
[NASA-CE-2027] p0147 A82-15894
Role of optical computers in aeronautical control applications
p0147 A82-15897
OPTICAL DATA STORAGE MATERIALS

FILE-1B aircraft flight test program --- Feature Identification and Location Experiment
[AAE 81-001] p0105 A82-16335
OPTICAL EQUIPMENT

MT CAMERAS
MT COLLIMATORS
MT INFRARED SPECTROMETERS
MT LASER DOUBLER PHASEMETERS
MT MULTISPECTRAL BAND SCANNERS
MT OPTICAL GYROSCOPES
MT OPTICAL MEASURING INSTRUMENTS
MT OPTICAL RADAR
MT OPTICAL SCANNERS
MT POLARIMETERS
MT TELEVISION CAMERAS
MT TELEVISION MONITORS

Laser gyro - The guiding light
p0333 A82-29792
OPTICAL IMAGES

U IMAGES

OPTICAL BASES MODULATION
U LIGHT MODULATION

OPTICAL BASES

L ASHERS

OPTICAL ALIGNMENT

A new angular deviation measurement device for aircraft transparencies
[AD-A113982] p0525 A82-28292
Method for the measurement of elastic deformations of aircraft models in a wind tunnel
[AD-A113972] p0226 A82-34308
OPTICAL MEASURING INSTRUMENTS

MT INFRARED SPECTROMETERS
MT MULTISPECTRAL BAND SCANNERS
MT OPTICAL SCANNERS
MT POLARIMETERS

Optical sensors for displacement measurement
[AD-A11407] p0147 A82-11407
Optical tip clearance sensor for aircraft engine controls
[AAV PAPER 82-1131] p0438 A82-37691
Some potential novel approaches to the automatic airborne detection and identification of ground targets
p0471 A82-27296
OPTICAL MODULATION

U LIGHT MODULATION

OPTICAL PATHS

GTD terrain reflection model applied to ILS glide scope --- Geometrical Theory of Diffraction
p0218 A82-23027
OPTICAL PROPERTIES

MT COLOR
MT OPTICAL REFLECTION
MT RADIANCE
MT REFLECTANCE
MT SKY RADIANCE

1-32A
OPTICAL CONTROL

Sensitivity reduction by double perfect model following -- with application to aircraft control
Integration of multi-sensor navigation data using optimal estimation techniques
Optimum three-dimensional flight of a supersonic aircraft
Optimal target designation techniques
Application of optimal control techniques to aircraft flutter suppression and load alleviation
Optimal control and estimation for strapdown seeker guidance of tactical missiles
Automation of the synthesis of control in a stationary linear system -- for aircraft flight control

OPTICAL RADAR
Options for T/E precision automated tracking system
Airborne laser tracking system
Remote sensing of turbine engine gases
Airborne laser measurements of smoke plane distribution, vertical transmission, and particle size
Cloud top remote sensing by airborne lidar
Airborne lidar measurements of the Souffriere eruption of 17 April 1979

OPTICAL SCANNERS
ST MULTISPECTRAL BAND SCANNERS
An optical data link for airborne scanning system
Application of an optical data link in the airborne scanning system
Opto-electronical push-broom scanners for navigation, reconnaissance and generation of digital data bases

OPTICAL SENSORS
U OPTICAL MEASURING INSTRUMENTS
U OPTICAL SIGNALS
U OPTICAL COMMUNICATION
U OPTICAL SPECTRUM
U LIGHT (VISIBILITY RADIATION)

OPTICAL TRACKING
ATARK laser tracking system
Simulated ILS using a laser tracker
Experimenal investigation of a helmet mounted sight/display for helicopter

OPTICAL WAVEGUIDES
Light-guided information distribution systems
Optical Information Processing for Aerospace Applications
Test and evaluation of UV fiber optics for application for aircraft fire detector systems

OPTICAL TRANSMISSION
Color measurements
Techniques suitable for a portable wear metal analyzer

OPTICAL REFLECTION
Reducing reflections on the front surface of air traffic control displays

OPTICAL MEASUREMENTS
Baseline monitoring using aircraft laser ranging
Spaceborne laser simulation and aircraft laser tracking
Remote sensing of turbine engine gases
Airborne laser measurements of smoke plane distribution, vertical transmission, and particle size

OPTICAL COMMUNICATION
Application of an optical data link in the airborne scanning system
Opto-electronical push-broom scanners for navigation, reconnaissance and generation of digital data bases

OPTICAL SPECTRUM
U LIGHT (VISIBILITY RADIATION)

OPTICAL TRACKING
ATARK laser tracking system
Simulated ILS using a laser tracker
Experimental investigation of a helmet mounted sight/display for helicopter

OPTICAL WAVEGUIDES
Light-guided information distribution systems
Optical Information Processing for Aerospace Applications
Test and evaluation of UV fiber optics for application for aircraft fire detector systems

OPTICAL TRANSMISSION
Color measurements
Techniques suitable for a portable wear metal analyzer

OPTICAL REFLECTION
Reducing reflections on the front surface of air traffic control displays

OPTICAL MEASUREMENTS
Baseline monitoring using aircraft laser ranging
Spaceborne laser simulation and aircraft laser tracking
Remote sensing of turbine engine gases
Airborne laser measurements of smoke plane distribution, vertical transmission, and particle size
Control design of flexible spacecraft

Optimal control and descent trajectories for airline missions

Management of redundancy in flight control systems using optimal decision theory

Application of singular perturbation theory

Computational methods of robust controller design for aeroelastic flutter suppression

Extension of proportional navigation by the use of optimal filtering and control methods

Multivariable aircraft control by maneuver commands: an application to air to surface gunnery

A method for applying linear optimal control theory to the design of a regulator for a flexible aircraft --- improving riding quality in fighter aircraft

Optical terrain-following feedback control for advanced cruise missiles

Multivariable control loop analysis and synthesis for complex flight systems

Prediction of aircraft handling qualities using analytical models of the human pilot

Optimization of auto-pilot equations for rapid estimation of helicopter control settings

Analytical and simulator study of advanced transport

Active flutter suppression using optical output feedback digital controllers

Integrated airframe propulsion control

System optimization by periodic control

ST FLIGHT OPTIMIZATION

ST OPTIMAL CONTROL

ST TRAJECTORY OPTIMIZATION

Optimization of the principal design parameters of a passenger aircraft

Flight vibration optimization via conformal mapping

Multilevel optimum design of structures with fiber-composite stiffened-panel components

Optimum journal bearing parameters for minimum rotor unbalance response in synchronous whirl

Analytical and experimental study of advanced transport

Active flutter suppression using optical output feedback digital controllers

Integrated airframe propulsion control

System optimization by periodic control

Numerical methods for the synthesis and optimization of aircraft systems

Optimization of propeller blade shape by an analytical method

The use of optimization techniques to design controlled diffusion compressor blades

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft

Optimization of the principal design parameters of a passenger aircraft
OZONE FILMS
Correlation of surface characterization of phosphoric acid anodize oxide with physical properties of bonded specimens p0293 882-27437

OZIDES
N2 CARBON MONOXIDE
N2 NITROGEN OXIDES
N2 SILICON OXIDES
OXIDES
N2 OZONE
OXIDATION SCHEME
A nitrogen enriched air system for the AV-8A Barrier [AD-41234] p0464 882-27239
OXIDIZER SUPPLEMENTARY MATERIAL
A nitrogen enriched air system for the AV-8A Barrier [AD-41234] p0464 882-27239
OXIDATION SUPPLY EQUIPMENT
U OXIDIZER SUPPLY EQUIPMENT
OZONE
Two-dimensional model studies of the impact of aircraft exhaust emissions on tropospheric ozone p0496 882-40124
Ozone and aircraft operations p0311 882-21145
OXIDATION
Aircrew cabin air ozone contamination and compliance with regulations p0342 882-31057
Ozone and aircraft operations p0311 882-21145

P-3 AIRCRAFT
Configuration management techniques for automatic testing p0295 882-27893
P-31 HELICOPTER
Rotor preliminary design trade-offs for the Advanced Scout Helicopter p0280 882-26395
PACKAGES
N2 INJECTOR PACKAGES
PACKET SWITCHING
Next generation military aircraft will require hierarchical/multilevel information transfer systems --- packet switching p0197 882-17114
PACKET TRANSMISSION
N2 PACKET SWITCHING
Tactical Airborne Distributed Computing and Networks [AEGIS-CP-3-01] p0195 882-17096
PADE APPROXIMATION
Pade approximation applied to flow past thin airfoils p0176 882-20728
PAINTS
Automated Paint and Process Line /APPL/ --- for aircraft production (AIAA 81-2166) p0002 882-10120
The experience of corrosion on French military aerodynamics p0211 882-17355

PAINTS FLUTTER
Kelvin-Helmholtz stability analysis of air cushion landing gear trunk flutter p0114 882-17608

PAINTS METHOD (FLUID DYNAMICS)
Recent improvements in prediction techniques for supersonic weapon separation [AIAA PAPER 82-13970] p0116 882-17820
Subsonic aerodynamic and flutter characteristics of several wings calculated by the SODUS P1.1 panel method [AIAA PAPER 82-0727] p0341 882-30193
Subsonic 3-D surface panel method for rapid analysis of multiple geometry perturbations [AIAA PAPER 82-0993] p0374 882-31954
Lateral aerodynamics of delta wings with leading edge separation [AIAA PAPER 82-1366] p0490 882-39142
Computational aerodynamics p0581 882-45851

A numerical method for studying nacelle-jet-airfoil interaction in inviscid three-dimensional flow p0096 882-13094
Development of an efficient procedure for calculating the aerodynamic effects of planform variation [NASA-CR-3489] p0137 882-14529
The PDA wing body 81 computer program. A panel method for determination of aerodynamic characteristics at subsonic and supersonic speeds [NASA-TN-AD-1601] p0406 882-25230
User's manual for the Automated Paneling Technique (APT) and the Wing Body Aerodynamic Technique (WBAT) programs [NASA-CP-165895] p0566 882-31297

PACKAGES
N2 CURVED PACKAGES
N2 WING PACKAGES
Response of nonlinear aircraft structural panels to high intensity noise p0016 882-12041
Acceleration response of fuselage sidewall panels on a twin-engine, light aircraft p0129 882-18729
Design, fabrication and test of liquid metal heat-pipe sandwich panels [AIAA PAPER 82-3902] p0373 882-31898
Temperature fields in three-layer panels with a honeycomb filler during unsteady heating p0367 882-34135
Design and fabrication of cured composite hat-stiffened panels p0513 882-40978
Analysis of multiple load path panels containing impact damage p0203 882-17170
Hurricane-induced wind loads [PB82-132267] p0476 882-27546
Noise transmission loss of aircraft panels using acoustic intensity methods [NASA-TP-2046] p0560 882-31069
PARABOLIC ANTENNAS
Prediction and performance of radome-covered reflector antennas p0080 882-15311
PARABOLIC BODIES
Helicopter rotor performance improvement by utilization of swept-back parabolic blade tip --- wind tunnel tests p0343 882-22151
PARABOLIC REFLECTORS
Prediction and performance of radome-covered reflector antennas p0080 882-15311
PARABOLIDS
U PARABOLIC BODIES
PARABOLIC DESCRIPT
Aerodynamics and performance of cruciform parachute canopies [AIAA PAPER 81-1919] p0006 882-10405
Experimental determination of parachute apparent mass and its significance in predicting dynamic stability [AIAA PAPER 81-2495] p0006 882-10405
Comparison of simulation and experimental data for a gliding parachute in dynamic flight [AIAA PAPER 81-2189] p0006 882-10409
Theoretical analysis of parachute inflation including fluid kinematics [AIAA PAPER 81-2125] p0006 882-10410
The constructed rigging line trials technique for assessing the opening characteristics of parachutes

A-328
P4B&SBTEBIZITIOI

SDBJECT IHD8X

NASA Dryden's experience is parameter estimation
and its uses in flight test
[4144 PAPEB 82-1373}
p0489 A82-39I35
Determination of airplane aerodynamic parameters
from flight data at high angles of attack
pOSOS 482-40928
Altitude estimation asing asynchronous alpha-beta
tracking filters
p0582 482-f6387
Parametric study of microwave-powered
high-altitude airplane platforms designed for
linear flight
[H4S4-TP-1918]
p0035 1182-11050
System identification helicopter parameters.
Determination from flight tests, phase 2
[BH7G-PB1T-80-J2]
p0099 H82-13137
practical experience mth a noncontact blade
vibration measuring system in industrial
turbocompressors
vibration mode identification
p O I 4 4 H82- 15065
Turboprop cargo aircraft systems study
[NASA-CB-I658I3]
p0189 N82-16070
Identification of multivariable high performance
turbofan engine dynamics from closed loop data
[NASA-TM-82785]
p0307 N82-20339
Analytical prediction of the interior noise for
cylindrical models of aircraft fuselages for
prescribed exterior noise fields. Phase 2:
Models for sidevall trim, stiffened structures
and cabin acoustics mth floor partition
[NASA-CB-165869]
p0358 S82-22952
Analysis and Monte carlo simulation of
near-terminal aircraft flight paths
[NASA-IP-1997]
p0367 H82-23233
system identification of nonlinear aerodynamic
models
p0540 N82-29996
Botorcraft blade mode damping identification from
random responses using a recursive maximum
likelihood algorithm
[NA5A-CB-3600]
p0607 H82-33373
PABASETEBIZATIOi
NT P4B4METEE IDENTIFICATION
Parameterization in the design of surfaces by
means of Coons' method
for computer aided
aircraft design

Field test of an in stack diffusion classifier on
an aircraft engine test cell
(AD-AM3811]
p0475 N82-27326
PARTICLES
NT AEBOSOLS
NT ALPHA PABTICLES
NT DBOPS (LIQUIDS)
NT FOG
NT LIGHT BEADS
NT HBTAL PABTICLES
NT HICBOPABTICLES
NT PHOTONS
HI SOOT
PABTS
0 COMPONENTS
PASCAL (PBOGBABHIN6 LiNGOAGE)
Formal specification and mechanical verification
of SIFT - A fault-tolerant flight control system
p0436 A82-37446
PASSENGEB AIBCBAFT
NT 4-300 AIBCBAFT
NT BO-105 HELICOPTEB
NT BOEING 727 AIBCBAFI
NT BOEING 737 AIBCBAFT
NT BOEING 747 AIRCRAFT
NT BOEING 757 AIBCBAFT
NT BOEING 767 AIBCBAFT
NT CESSNA 172 AIBCBAFT
NT CESSNA 402B AIBCBAFT
NT CH-46 HELICOPTEB
NT CH-47 HELICOPTEB
NT DC 8 AIBCBAFT
NT DC 10 AIBCBAFT
NT EUBOPEAN AIBBUS
NT F-27 AIBCBAFT
NT F-28 TBANSPQBT AIBCBAFT
NT HFB-320 AIBCBAFT
NT L-IOI 1 AIBCBAFT
NT SE-210 AIBCBAFI
NT TD-144 AIBCBAFT
NT Y4K 40 AIBCBAFT

Hoi large should a couimuter transport be
[AIAA PAPEB 81-1732]
pOOOa A82-10463
Optimization of the principal design parameters of
a passenger aircraft
pOOlO A82-10816
Flight testing De Havilland Aircraft Limited
DASH-8 utilizing onboard data analysis by
microprocessor

p0582 482-16620

Estimation of airplane stability and control
derivatives from large amplitude longitudinal
maneuvers
[NASA-TH-83185]
p0028 N82-10042
Experimental verification of an aerodynamic
parameter optimization program for wind tunnel
testing
[AD-A107727]
p0199 N82-17I34
Parametric criteria and impact on design trends
p0247 N82-I8139
P4BAIIHGS
Nonlinear two-dimensional sail theory
[AD-AII0450]
p0405 882-25220
PABIIAJ. DIFFEBBIITIAL EQUATIONS
NT ELLIPTIC DIFFERENTIAL EQUATIONS
NT GAUSS EQUATION
Potentiality assessment of a parallel structure
for the solution of partial differential equations
p0383 482-33628
PABTICLE IIIEBACTIONS
NT CONFIGURATION INTBBACTION
PABTICLE HOTION
The relative motion of a particle in the case of
exponential changes of the velocity of the medium
p0281 A82-26479
Liquid particle dynamics and rate of evaporation
in the rotating field of centrifugal compressors
[ASME PAPEB 82-GT-86]
pOU23 482-35332
PABCICLE PBECIPITATIOi
Intake design with particular reference to ice
protection and particle separators
p0208 1182-172 18
PABTICLE SIZE DISTBIBOTION
Determination of vertical profiles of aerosol size
spectra from aircraft radiative flux
measurements. II - The effect of particle
nonsphericity
p0020 482-12149
Airborne lidar measurements of smoke plume
distribution, vertical transmission, and
particle size
p0181 A82-2I386

C A I A A PAPEB 81-2507]

p0057 A82-13907

1*0 at a time - Flight test plans for the new
Boeing airliners
[AIAA PAPEB 81-2378]
p0059 A82- 1394 I
CT7 - GE attacks commuter turboprop market
p0083 A82-15950
Optimum configuration for a 10 passenger business
turbofan jet airplane
[AIAA PAPEB 82-0365]
pO 119 A82-17905
Boeing 757 - Introducing the big-fan narrowbody
p O I 2 6 A82-18349
Improvement of fuel economy by flying with maximum
rearward center-of-gravity positioning
p022l A82-23470
Development of maintenance programmes through the
functional, structural and flight test phases
p0223 A82-24003
Fuel-efficient windshields for transport, commuter
and business aircraft
p0226 A82-24304
The reliability and safety of small passenger
aircraft
p024t A82-24972
thy twin-fuselage aircraft
p0296 A82-28276
Aircraft pitch attitude as a performance parameter
p0298 A82-28519
The beginning of the ATB 42 program and its
importance
P0382 A82-33543
A gust damper
for light passenger aircraft
p0436 A82-37I27
Hinimization of the total costs incurred in the
employment of passenger jet aircraft
P0490 A82-39247
Optimized 10 ton class commercial aircraft engine
p0505 A82-40890
Advanced technologies applied to reduce the
operating costs of small commuter transport
aircraft
A-330


<table>
<thead>
<tr>
<th>Subject</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced composite integral structures meet the challenge of future aircraft systems</td>
<td>p6288 A82-27133</td>
</tr>
<tr>
<td>Performance degradation of propeller/rotor systems due to ice accretion</td>
<td>p6297 A82-28322</td>
</tr>
<tr>
<td>Prediction of aerodynamically induced vibrations and turboacoustic noise</td>
<td>p6327 A82-28986</td>
</tr>
<tr>
<td>Approximate method of predicting heating on the windward side of Space Shuttle Orbiter and comparisons with flight data</td>
<td>p6373 A82-31653</td>
</tr>
<tr>
<td>Solar-powered airplane design for long-endurance, high-altitude flight</td>
<td>p6376 A82-31684</td>
</tr>
<tr>
<td>Development of a helicopter rotor/propulsion system for straignt rectangular diffuser</td>
<td>p6425 A82-35352</td>
</tr>
<tr>
<td>An inviscid-viscous interaction treatment to predict the blade-to-blade performance of axial compressors with leading edge normal shock waves</td>
<td>p6425 A82-35363</td>
</tr>
<tr>
<td>A stage-by-stage dual-spool compression system</td>
<td>p6427 A82-35394</td>
</tr>
<tr>
<td>Evaluation criteria for aero engine materials</td>
<td>p6427 A82-35396</td>
</tr>
<tr>
<td>General purpose research rotor</td>
<td>p6429 A82-36065</td>
</tr>
<tr>
<td>Analytic extrapolation to full scale aircraft</td>
<td>p6488 A82-39105</td>
</tr>
<tr>
<td>Analyses of an airplane windshield anti-icing system</td>
<td>p6490 A82-39108</td>
</tr>
<tr>
<td>Correlation of predicted vibrations and test data for a wind tunnel helicopter model</td>
<td>p6499 A82-40512</td>
</tr>
<tr>
<td>Digital computer simulation of modern aeronautical communication systems</td>
<td>p6499 A82-40515</td>
</tr>
<tr>
<td>The prediction of propeller/wing interaction effects</td>
<td>p6509 A82-40540</td>
</tr>
<tr>
<td>Development of the Circulation Control Wing-Sp, Surface blowing powered-lift system for STOL aircraft</td>
<td>p6512 A82-40969</td>
</tr>
<tr>
<td>A survey regarding the German-French development program Alpha Jet</td>
<td>p6550 A82-43332</td>
</tr>
<tr>
<td>Electronic warfare system measure of effectiveness</td>
<td>p6688 A82-43840</td>
</tr>
<tr>
<td>Pneumatic tire model for aircraft simulation</td>
<td>p6688 A82-43840</td>
</tr>
<tr>
<td>A simplified method for predicting rotor blade airloads</td>
<td>p6757 A82-45187</td>
</tr>
<tr>
<td>The airplane manufacturer and meteorology --- in prediction of weather effects on aircraft performance</td>
<td>p6879 A82-45821</td>
</tr>
<tr>
<td>Energy models used in air combat performance comparisons</td>
<td>p6879 A82-45850</td>
</tr>
<tr>
<td>Computational aerodynamics</td>
<td>p6879 A82-45851</td>
</tr>
<tr>
<td>Parametric study of microwave-powered high-altitude air platform designed for deep space missions</td>
<td>p6879 A82-11610</td>
</tr>
<tr>
<td>Experimental and analytical studies of advanced air cushion landing systems</td>
<td>p6879 A82-11610</td>
</tr>
<tr>
<td>Simulator certification methods and the vertical motion simulator</td>
<td>p6879 A82-11610</td>
</tr>
<tr>
<td>Pneumatic tire model for aircraft simulation</td>
<td>p6879 A82-11610</td>
</tr>
<tr>
<td>Axial compressor stall and surge</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>Single stage transonic compressor and equivalent plane cascade</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>The through flow calculations</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>Evaluation of profile loss predictions based on diffusion factors</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>Blade-to-blade computations and boundary layer correlations in axial compressors and turbines</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>Foundations for computer simulation of a low pressure oil flooded single screw air compressor</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>The benefits of data exchange --- between airline and engine manufacturers</td>
<td>p6905 A82-11937</td>
</tr>
<tr>
<td>Use of optimization to predict the effect of selected parameters on computer aircraft performance</td>
<td>p6905 A82-26279</td>
</tr>
<tr>
<td>User's manual for the vertical axis wind turbine</td>
<td>p6905 A82-26279</td>
</tr>
<tr>
<td>Nonlinear constitutive theory for turbine engine structural analysis</td>
<td>p6905 A82-26279</td>
</tr>
<tr>
<td>PERFORMANCE TESTS</td>
<td>PERFORMANCE TESTS</td>
</tr>
<tr>
<td>Interoperability testing of decentralized command, control, communications and intelligence (C3I) systems</td>
<td>p7003 A82-10413</td>
</tr>
<tr>
<td>Air bag impact attenuation systems for the AH-64 remote piloted vehicle</td>
<td>p7006 A82-10403</td>
</tr>
<tr>
<td>Aerodynamics and performance of cruciform parachute canopies</td>
<td>p7006 A82-10403</td>
</tr>
<tr>
<td>The constructed rigging line trials technique for assessing the opening characteristics of parachutes</td>
<td>p7053 A82-10403</td>
</tr>
<tr>
<td>High-efficiency hydraulic power transfer units for multiphase aircraft</td>
<td>p7053 A82-10403</td>
</tr>
<tr>
<td>The certification of digital systems</td>
<td>p7053 A82-10403</td>
</tr>
<tr>
<td>FAA acceptance tests on the NAVSTAR GPS 2-Set receiver</td>
<td>p7053 A82-10403</td>
</tr>
</tbody>
</table>
A decoupled control system for improved flight performance in wind shear

Helicopter icing

C-5A unrefueled taxi and off-load demonstrations

Performance assessment of an advanced rebreather turbofan engine

Planning a helicopter flight test program

The Air Force Flight Test Center - Utah Test and Training Range in the 1980's

A unique integrated flight testing facility for advanced control/display research

Evaluation of a high-accuracy, low-cost accelerometer

Testing of the JSF-5A ejection seat for the F/A-18 aircraft

Test and evaluation of improved aircrew restraint systems

Performance assessment of the ACES-I1 ejection seat-4-10 configurations

Analytical and experimental characterization of the J99/A-10 cartridge actuated initiator for use in aircrew escape system performance evaluation

Experience with high performance V/STOL fighter projects at HBO

The German-Dutch wind tunnel as aeroacoustic experimental installation

Results of a Differential Omega experiment

JT10D distributed TDA/TDI/terminal development results with emphasis on relative navigation performance

Prediction of aircraft interior noise using the statistical energy analysis method

Conductive program for lightning strike protection on aircraft

NAVSTAR Global Positioning System

Performance flight test evaluation of the Bell-Boeing JP-1 Jetwing STOL research aircraft

The Global Positioning System Evaluation Facility for testing in dissimilar wide range environments

A new facility and technique for two-dimensional aerodynamic testing

Real time digital filtering test in the S1 continuous wind tunnel at Norden

Effects of filler materials upon radome rain erosion performance at subsonic conditions

Duplication of radome aerodynamic heating using the Central Receiver Test Facility solar furnace

Operational testing of the LRT-33 inertial navigation system

Instrumentation for testing aircraft anti-ice protection

Influence of airblast atomizer design features on mean drop size

Increased capabilities of the Langley Mach 7 Scramjet Test Facility

The performance of centrifugal compressor channel diffusers

Cold regions testing of an air transportable shelter

Production Verification Testing (PVT) of guidance and control systems for high reliability

Evaluation of sensitivity of ultrasonic detection of disbonds in graphite/epoxy to metal joints

Experimental performance evaluation of 'Ventilated mixers' - A new mixer concept for high bypass turbofan engines

Performance of the Rotor Systems Research Aircraft calibrated rotor loads measurement system

Analysis of built-in-test accuracy

Bonding procedure for Teflon seals

Preliminary experiments on a centrifugal research compressor using a laser -2- focus velocimeter

The Modular Automated Heating System (BARS) concept --- airfield weather support

XV-15 tilt rotor fly-by-wire collective control demonstrator development specifications

Effect of fuel injector type on performance and emissions of reverse-flow combustor

Single stage transonic compressor and equivalent plane cascade

BBC/Sailer. 4 stage transonic compressor

Preliminary results on performance testing of a turbocharged rotary combustion engine

Toll rotor studies for satisfactory performance: Strength and dynamic behavior

Production Verification Testing (PVT) of guidance and control systems for high reliability

Cold regions testing of an air transportable shelter

Flight trials of the Littoral EW-210 data link navigation system in a Wessex helicopter

A-333
PERIODICITY
U PERIODIC VARIATIONS
PERSONNEL
ST AIR TRAFFIC CONTROLLERS (PERSONNEL)
ST AIRCRAFT PILOTS
ST PILOTS (PERSONNEL)
ST TEST PILOTS
Aerospace engineers: We’re tomorrow-minded people
[NASA-CE-180-149]
Addl1ional functions within the air traffic control system
p0535 W82-29309
PERTURBATION
Singularity perturbation techniques for real time
aircraft trajectory optimization and control
[NASA-CR-3597]
p0570 W82-31330
PERTURBATION THEORY
Systems of systems for evaluating gyrostabilizer
state with unknown disturbances
p0015 W82-11469
Comparison between the exact and an approximate
feedback solution for medium range interception
problems
p0044 W82-13106
Application of singular perturbation theory
p0065 W82-12050
Computational methods of robust controller design
for aerodynamic flutter suppression
[NASA-CR-16903]
p0089 W82-12086
Integrated airframe propulsion control
[NASA-CR-3606]
p0593 W82-32382
PETROLEUM
U CLOUDE OIL
PETROLEUM PRODUCTS
ST DIESEL FUELS
ST GASOLINE
ST LUBRICATING OILS
ST NATURAL GAS
PHANTOM AIRCRAFT
ST F-4 AIRCRAFT
PHASE ANGLE
U PHASE SHIFT
PHASE ERROR
Antenna (selected articles)
[AD-A108174]
p0269 W82-19448
PHASE LOCKED SYSTEMS
High speed microwave phase-locked loops
p006 W82-14696
Modelling of a tracking radar in terms of a
nonlinear second order phase lock loop
[AD-A115626]
p0596 W82-32380
PHASE MODULATION
B.P. calibrators for Doppler radars
p150 W82-18917
Combined amplitude-phase modulation for a THF
communication link
p0553 W82-43070
PHASE RULE
A further study of helicopter rotor
pitch-flap-phase coupling
[AD-256]
p0265 W82-19214
PHASE SHIFT
B.P. calibrators for Doppler radars
p150 W82-18917
PHASE TRANSFORMATIONS
ST COIL LIQUIDATION
PHASED ARRAYS
Using phased array radar for data communications
p006 W82-14725
Air-to-ground N2I radar using a displaced phase
center, phased array
p0075 W82-14861
Radar frequency radiation
[AD-A11152]
p0411 W82-25424
Spiral slotted phased antenna array
p0476 W82-27558
PHOTOVOLTAIC CELLS
Failure analysis of silica phenolic nozzle liners
p0293 W82-27437
PHOTOELECTRIC CELLS
U PHOTOVOLTAIC CELLS
PHOTOGRAPH INTERPRETATION
U PHOTOINTERPRETATION
PHOTOGRAPHIC EQUIPMENT
MT CAMERAS
MT TELEVISION CAMERAS
PHOTOGRAPHIC PLATES
High-sensitivity holographic plates Pl-3m
p0519 W82-41575
PHOTOGRAPHS
MT MOTION PICTURES
PHOTOGRAPHY
UT AERIAL PHOTOGRAPHY
UT COLOR INFRARED PHOTOGRAPHY
UT ELECTRO-OPTICAL PHOTOGRAPHY
UT PHOTOGRAHY
UT HOLOGRAPHY
UT INFRARED IMAGERY
UT INFRARED PHOTOGRAPHY
UT SATELLITE-BORNE PHOTOGRAPHY
UT SATELLITE-BORNE IMAGERY
UT SHADOWGRAPH PHOTOGRAPHY
MT STEREOPHOTOGRAPHY
MT STEREOSCOPY
High-altitude imagery user guide
[PH82-156353]
p0562 W82-30608
PHOTOINTERPRETATION
Photointerpretation key for pulse regeneration
analysis using high-altitude color infrared
panoramic photography
[PH82-164650]
p0562 W82-30608
PHOTOMAPPING
Algorithms for an adaptive dynamic window in
electronic map systems
p0071 W82-14769

A-334
Multiple Doppler radar observations of PBL structure

In-plane shear test of thin panels

Optimization of requirements on the

Boom probe position error corrections for Sea King

Fracture mechanics based nodelling of the

Correlation of Preston-tube data with laminar skin

Correcting for turbulence effects on average

An experimental study of dynamic stall on advanced

A two-degree-of-freedom flutter mount system with

Development and flight test evaluation of a pitch

Damping for testing rigid wings at different

Wing flap-type control effectiveness and effects of

Multiple Doppler radar observations of PBL structure

In-plane shear test of thin panels

Optimization of requirements on the

Boom probe position error corrections for Sea King

Fracture mechanics based nodelling of the

Correlation of Preston-tube data with laminar skin

Correcting for turbulence effects on average

An experimental study of dynamic stall on advanced

A further study of helicopter rotor

A two-degree-of-freedom flutter mount system with

Development and flight test evaluation of a pitch

Damping for testing rigid wings at different

Wing flap-type control effectiveness and effects of

Development and flight test evaluation of a pitch

Stability augmentation system for a relaxed

Wind tunnel measurements of longitudinal stability and control characteristics of primary and

Secondary wing configurations

A calculation method for slender wing-body

configurations in supersonic flow at high angles

of attack --- nonlinear force and pitching

moment characteristics

A further study of helicopter rotor

pitch-flap-phase coupling

A two-degree-of-freedom flutter mount system with

low damping for testing rigid wings at different

angles of attack

An experimental study of dynamic stall on advanced

airfoil sections. Volume 1: Summary of the

experiment

Effects of intake geometry on circular pitot

intake performance at zero and low forward speeds

Sea King flight tests pitot-static probe and

directional wind instrumentation

Boom probe position error corrections for Sea King

65 flight tests

Correcting for turbulence effects on average

velocity measurements made using five-hole

spherical pitot tube probes

Correlation of Preston-tube data with laminar skin

friction (Log No. J12984)

Optimization of requirements on the

putting-prevention properties of turbojet-engine

oils

Fracture mechanics based modelling of the

corrosion fatigue process

PITOT TUBES

PICTURE

PIGMENT

PICTORIAL INDEX

PILOTED VENG AIRCRAFT

U TILT VENG AIRCRAFT

PLANE STRAIN

In-plane shear test of thin panels

PLANETARY BOUNDARY LAYER

Multiple Doppler radar observations of PBL structure

PLANETARY ENTRY

U ATMOSPHERIC ENTRY

PLANETARY EXPLORATION

U SPACE EXPLORATION

PLANETARY SPACE FLIGHT

U INTERPLANETARY FLIGHT

PERFORMS

NT ARROW WINGS

NT CAREY WINGS

MY DELTA WINGS

MY INFINITE STREAM LINES

MY RECTANGULAR PLATES

MY SWEEP FORWARD WINGS

MY SWEEPBACK WINGS

MY TAPERED TAIL SURFACES

MY TRIANGULAR WINGS

MY VARIABLE SWEEP WINGS

MY VERTICAL TAIL WINGS

Pressure distributions on three different

cruisers aft-tail control surfaces of a

windspeed missile at Mach 1.60, 2.36, and 3.70.

Volume 1: Trapezoidal tail

NT ELECTROSTATIC PROBES

PLASMA SPRAYING

Improved plasma sprayed CrAlY coatings for

aerospace gas turbine applications

Thermal-barrier-coated turbine blade study

(NAE-TM-16551)

Progress in protective coatings for aircraft gas

turbines: A review of NASA sponsored research

(NAE-TM-0276)

PLASTIC AIRCRAFT STRUCTURES

On the use of carbon composites in slat and

stabilizer construction

Seven years experience with Kevlar-49 in the --

Lockheed L-1011 TriStar

Lear Fan - The plastic aeroplane arrives

Conference on Aerospace Transparencies, London,

England, September 8-10, 1980, Proceedings

Improved plasma sprayed CrAlY coatings for

aerospace gas turbine applications

Thermal-barrier-coated turbine blade study

(NAE-CR-16551)

Progress in protective coatings for aircraft gas

turbines: A review of NASA sponsored research

(NAE-TM-0276)

PLASTIC AIRCRAFT STRUCTURES

On the use of carbon composites in slat and

stabilizer construction

Seven years experience with Kevlar-49 in the --

Lockheed L-1011 TriStar

Lear Fan - The plastic aeroplane arrives

Conference on Aerospace Transparencies, London,

England, September 8-10, 1980, Proceedings

Improved plasma sprayed CrAlY coatings for

aerospace gas turbine applications

Thermal-barrier-coated turbine blade study

(NAE-CR-16551)

Progress in protective coatings for aircraft gas

turbines: A review of NASA sponsored research

(NAE-TM-0276)

MY DELTA WINGS

MY INFINITE STREAM LINES

MY RECTANGULAR PLATES

MY SWEEP FORWARD WINGS

MY SWEEPBACK WINGS

MY TAPERED TAIL SURFACES

MY TRIANGULAR WINGS

MY VARIABLE SWEEP WINGS

MY VERTICAL TAIL WINGS

Pressure distributions on three different

cruisers aft-tail control surfaces of a

windspeed missile at Mach 1.60, 2.36, and 3.70.

Volume 1: Trapezoidal tail

NT ELECTROSTATIC PROBES

PLASMA SPRAYING

Improved plasma sprayed CrAlY coatings for

aerospace gas turbine applications

Thermal-barrier-coated turbine blade study

(NAE-TM-16551)

Progress in protective coatings for aircraft gas

turbines: A review of NASA sponsored research

(NAE-TM-0276)

PLASTIC AIRCRAFT STRUCTURES

On the use of carbon composites in slat and

stabilizer construction

Seven years experience with Kevlar-49 in the --

Lockheed L-1011 TriStar

Lear Fan - The plastic aeroplane arrives

Conference on Aerospace Transparencies, London,

England, September 8-10, 1980, Proceedings

Improved plasma sprayed CrAlY coatings for

aerospace gas turbine applications

Thermal-barrier-coated turbine blade study

(NAE-CR-16551)

Progress in protective coatings for aircraft gas

turbines: A review of NASA sponsored research

(NAE-TM-0276)
PLASTIC COATINGS

The Model 412 multi-bladed rotor system p0220 A82-24320
C9-47 fiberglass rotor blade design and fabrication p0277 A82-26376
Structural design and construction of the New Technology Wing p0280 A82-26397
Future helicopter technology p0283 A82-26541
Design and production of fiberglass helicopter rotor blades p0284 A8-26620
Addition polyamide adhesives containing various end groups p0329 A82-29098
On the characterization of damages in graphite-epoxy composites (AIAA 82-0757)
A giant step toward composite helicopters p0336 A82-30117
Aging of composite rotor blades p0341 A82-30296
Development of the advanced composite ground spoiler for C-1 medium transport aircraft p0495 A82-39895
Development status of a composite vertical stabilizer for a jet trainer p0496 A82-39897
Operation VIF - Development of a composite material wing p0509 A82-40934
Materials and structures/ACEE [NASA-PAGES-117/B-91] p0407 A82-25242
Development of materials and manufacturing technology over the next 20 years: Composite materials [NHB-UP-34/1-B-0] p0527 A82-28365

PLASTIC COATINGS

Abrasion resistant coated plastic products for aircraft p0226 A82-24210
Proposed method for abrasion testing transparent plastics and coatings p0227 A82-24231
Airframe surface coatings for drag reduction/erosion protection [SAE PAPER 811070] p0232 A82-24401

PLASTIC DEFORMATION

Superplastic aluminum evaluation p0210 A82-17338

PLASTIC FILLS

U POLYURETHANE FILMS

PLASTIC FLOW

Material flow and defect formation in forging an airfoil shape from metal-matrix composites p0305 A82-33995

PLASTIC MATERIALS

U PLASTICS

PLASTIC PROPERTIES

U SUPERPLASTICITY

U THERMOPLASTICITY

U VISCOPLASTICITY

U YIELD POINT


PLASTIC YIELDING

U PLASTIC DEFORMATION

PLASTICITY

U POLYURETHANE PROPERTIES

PLASTICS

U ACRYLIC RESINS

U CARBON FIBER REINFORCED PLASTICS

U EPOXY RESINS

U KEVLAR (TRADEMARK)

U PHENOLIC RESINS

U POLYAMIDE RESINS

U POLYETHYLENE RESINS

U POLYTETRAFLUOROETHYLENE

U REINFORCED POLYMERES

U TETROFLON (TRADEMARK)

U THERMOPLASTIC RESINS


SUBJECT INDEX

Heat release rate calorimetry of engineering plastics p0518 A82-41075

PLASTIGLOWS

U SMOKE

PLATE (METAL)

U METAL PLATES

PLATES (STRUCTURAL MEMBERS)

U CANTILEVER PLATES

U CORRODED PLATES

U POROUS PLATES

U REINFORCED PLATES

PLATINUM COMPOSITES

The protection of gas turbine blades - a platinum aluminode diffusion coating p0663 A82-14364

PLENUM CHAMBERS

Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines p0095 A82-13087

PLIES

U LAYERS

PLOTTERS

Loran-C plotting program for plotting lines of position on standard charts p0405 A82-26206

Program for the transonic wind tunnel A13 processing installation. Part 8: Programs for processing data on the central site computer [AD-41202] p0527 A82-28310

PLOTTING

Multivariable design techniques based on singular value generalizations of classical control p0229 A82-10051

PLOTTING INSTRUMENTS

U PLATTERS

PLANES

U ROCKET EXHAUST

AER PLANE FLow properties for infrared analysis
AER PLANET - Augmented Deflecting Exhaust Nozzle p0311 A82-17606
Airborne lidar measurements of smoke plane distribution, vertical transmission, and particle size p0311 A82-17606
Aerodynamic interactions with turbulent jet exhaust plumes p0311 A82-21386
Airborne lidar measurements of the Soufriere eruption of 17 April 1979 p0301 A82-33225
Fuel-rich plume combustion p0301 A82-33657
Field test of an in stack diffusion classifier on an aircraft engine test cell [AD-111381] p0475 A82-27326
Predictive model for jet engine test cell opacity [AD-1117595] p0610 A82-33397

PLASTICHEAPGRAPHS

U BIAS SAGES

U RECORDING INSTRUMENTS

PLT ORIENTATION

Improvement of the first-ply-failure strength in laminates by using softening strips p0104 A82-16174

PHRENOGRAPHIC CONTROL

A dual input actuator for fluidic backup flight control p0043 A82-13088

PHRENOGRAPHIC EQUIPMENT

A new APU for medium place aircraft environmental control systems [ASME PAPER 81-ENAS-1] p0010 A82-10889
Towards minimum power for environmental control in transport aircraft [ASME PAPER 81-ENAS-4] p0011 A82-10892
Air supply system bite for Boeing 767 airplane --- [AD-4109807] p0055 A82-44244
Development of a supported airbag restraint (SABER) for windblast protection [AD-4109807] p0053 A82-20162
POLY Tetrapropylene

Performance of PTFE-lined composite journal bearings
[ASLE PAPER 82-AM-14-1] p0043 A82-37854

Polyurethane foam for aircraft shock mounts. 3: Vibrational damping by polymer foam
[AD-1104685] p0040 A82-11212

Recent boundary-layer investigations with suction in the Langley 0.5-M Transonic Cryogenic Tunnel
[AIAA PAPER 82-0234] p0117 A82-17588

Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces
p0505 A82-40894

Development of low modulus material for use in ceramic gas path seal applications
[NASA-CR-165469] p0277 A82-10039

Icing tunnel tests of a composite porous leading edge for use with a liquid anti-ice system --- Lewis icing research tunnel
[NASA-CR-164966] p0035 A82-11052

Gas turbine ceramic-coated-vane concept with convection-cooled porous metal core
[NASA-TP-1942] p0134 A82-14090

Turbulent boundary layer on a porous surface with injection at various angles to the wall
p0492 A82-29482

Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vanes
[ASME PAPER 81-ST-68] p0011 A82-10952

End losses in turbine cascades with porous cooling
p0014 A82-11434

Results of experimental study of heat transfer to turbine blades with porous cooling
p0014 A82-11446

Correctness for wall effects in wind tunnels
[ONERA, TP No. 1962-34] p0548 A82-92810

Portable transparency optical test system /P-T01S/
p0226 A82-24309

The stability of portable bridges carried on slings beneath helicopters
[ASLE/AERO-EPST-154] p0219 A82-21213

Techniques suitable for a portable wear metal analyzer
[AD-111352] p0011 A82-25488

A solution to the static geometry problem for JTIDS relative navigation
p0022 A82-12634

PLRS engineering development testing - Early results --- Position Location Reporting System with data communication network for community users in tactical environment
p0124 A82-18157

Coordinate transformation in PLRS --- algorithm and error analysis of Position Location and Reporting System
p0124 A82-18158

Loran for precise position location - The VHF/NAV system
p0235 A82-24668

Lightning detection and ranging
p0277 A82-26367

Construction and testing of an Omega navigation system for the balloon-borne X-ray experiment --- German thesis
p0569 A82-83111

Passive direction finding and signal location
p0576 A82-65346

The statistical theory of radio direction finding
[AD-1104156] p0025 A82-10027

A possible way of specifically correcting location and navigational errors caused by reflection and other propagation anomalies
[ESA-TP-667] p0253 A82-18198

Doppler radar-research and application to aviation flight safety, 1977 - 1979
[AD-1109985] p0303 A82-20163

Risk air Traffic Control and Landing Sytstem (RPACS Investigation), volume 1
[AD-110862] p0394 A82-24188

Risk air Traffic Control and Landing System (RPACS Investigation), volume 2
[AD-110863] p0394 A82-24169

A comparison of pole positions derived from GPS satellite and navy navigation satellite observations
[AD-110765] p0469 A82-26260

The effect of ionospheric variability on the accuracy of high frequency position location
[AD-1107425] p0450 A82-26274

Mode S system accuracy
[AD-112249] p0467 A82-27266

Geodesic paths of an ellipsoid-mounted antenna
[AD-110453] p0596 A82-32573

Updated station selection procedures to support automatic Omega receiver operation
p0567 A82-194712

AW/TBF-25 and AW/GPS-22 precision approach radars
p0075 A82-14056

Manoeuvre dependent component error models and synchronised reset filters for inertial navigation systems
p0122 A82-18139

Laboratory and flight test of a new BLG strapdown INS
p0123 A82-18150

Position extrapolation quality calculation for inertial and Doppler/INS navigation systems
p0123 A82-18151

JTIDS distributed TDM/DTDM terminal development results with emphasis on relative navigation performance
p0123 A82-18152

A natural parameter-controller specification procedure for an integrated radio/dead reckoner navigation system
p0124 A82-18155

Coordinate transformation in PLRS --- algorithm and error analysis of Position Location and Reporting System
p0124 A82-18158

Enhanced noise immunity and error control in a fully integrated JTIDS/GPS receiver --- Joint Tactical Information Distribution System
p0125 A82-18171

The application of NAVSTAR differential GPS in the civilian community
p0235 A82-24645

Loran-C NAV in mountainous areas
p0236 A82-24649

The reliability of height and identity data --- secondary surveillance radar error analysis
p0241 A82-30312

Altitude estimation using asynchronous alpha-beta tracking filters
p0562 A82-46307

A possible way of specifically correcting location and navigational errors caused by reflection and other propagation anomalies
p0253 A82-18198

Boom probe position error corrections for Sea King HZ 50 flight tests
p0304 A82-20177

Gravity induced position errors in airborne inertial navigation
[AD-113823] p0467 A82-27272

Wide field of view laser beacons system for three-dimensional aircraft position measurement
[ASME PAPER 81-WA/DSC-9] p0236 A82-24563

Passive direction finding and signal location
p0578 A82-65346

A global atlas of GFOG-3 significant wakeheight data and comparison of the data with national buoy data
[NASA-CR-156882] p0146 A82-15498

Aircraft position measurement using laser beacon optics
[AD-110793] p0189 A82-16067

An unbiased analysis of the Doppler coordinate systems
[AD-110510] p0450 A82-26269

Positioning devices (Machinery)
Positioning equipment

A-340
POWER GAIN

Will power-by-wire replace power-by-hydraulics? p0067 A82–14707

Recent improvements in aircraft Ni–Cd cells p0225 A82–29245

Analysis of changes in the gas-dynamic parameters of a gas-turbine helicopter engine during acceleration p0334 A82–29872


Performance analysis of the test results on a two-stage transonic fan [ASME PAPER 82–GT–123] p0425 A82–35353


The Power Pair Locus - A preliminary design aid to select power ratings for multi-engined helicopters p0546 A82–92474

Development of high loading, high efficiency axial flow turbine p0583 A82–47069

Evaluation of the design, construction and operation of a gas-fueled engine driven heat pump [NBS–034] p0213 B82–17459


POWER GAIN

Selection of optimum antennas for tracking telemetry intrumented airborne vehicles p0290 A82–27228

Scanning LF and MF antenna radiation patterns by means of a helicopter p0391 A82–34772

POWER GENERATORS

U ELECTRIC GENERATORS

POWER PROCESSING SYSTEMS

POWER CONDITIONING

POWER SERIES

AT TAYLOR SERIES

POWER SUPPLY CIRCUITS

High voltage/high power for airborne applications p0063 A82–15918

L-band power generation in the General Electric solid-state radar p0150 A82–18914

Power system design optimisation using LeGrange multiplier techniques p0176 B82–20743

POWERED LIFT AIRCRAFT

Powered-lift takeoff performance characteristics determined from flight test of the Quiet Short-haul Research Aircraft /QSR/A/ [AIAA PAPER 81–2609] p0053 A82–13852

Development of the Circulation Control Wing–Upper Surface Blowing powered-lift system for STOL aircraft p0512 A82–80569

Ejector powered propulsion and high lift subsonic wing p0512 A82–40970

Flight experiments using the front-side control technique during piloted approach and landing in a powered lift STOL aircraft [NASA–TM–8137] p0856 B82–26314


Analysis of several glidepath and speed control autopilot concepts for a powered lift STOL aircraft [NASA–TM–64282] p0611 B82–33400

POWERED MODELS


PRACTICES

U PROCEDURES

PREAMPLIFIERS

A balanced active antenna and impulse noise blanket system for the Haydant T radio navigation receiver

SUBJECT INDEX

{AD–A14074} p0468 B82–27275

PRECAUTIONS

U ACCIDENT PREVENTION

PRESCRIPTION (ARITHMETIC)

RT BAIN

The evolution of airborne weather avoidance radar toward a calibrated remote rain gauge using RABEC — Rain Echo Attenuation Compensation Hardware p0004 B82–10225


Evaluation of a meteorological airborne pulse doppler radar [7826–15660] p0562 B82–30620

PRESCRIPTION HARDWARE

Forbiddability of INCLOY alloy MA 956 – an oxide dispersion strengthened steel alloy p0385 A82–33994

PREDICTION ANALYSIS TECHNIQUES


A method for predicting the lifetime of gas turbine blades p0106 A82–16692

Methods and models for predicting fatigue crack growth under random loading Book p0168 B82–20506

New processes and methods of technical diagnostics and prognostic in the case of the engine HB–8–4. II p0315 A82–29925

Evaluation of two analytical methods for the prediction of inset flow fields in the vicinity of generalized forebodies [AIAA PAPER 82–0695] p0374 A82–31935

Prediction of separated asymmetric trailing-edge flows at transonic Mach numbers [AIAA PAPER 82–1021] p0755 B82–19794

Turbine blade nonlinear structural and life analysis [AIAA PAPER 82–1056] p0415 A82–30498


Turbine stage heat flux measurements [AIAA PAPER 82–1269] p0419 A82–35102

Design to life cycle cost capability of the PRICE models [JAP PAPER 82–221] p0556 A82–44695

Prediction of aerodynamic loads on aircrafts with external stores at transonic speeds p0101 B82–13813

Prediction of flyover jet noise spectra from static tests [NASA–TM–83219] p0139 B82–14080


Deviation/turning angle correlations p0205 B82–17193

Gunfire blast pressure predictions p0345 B82–22170

Predictions of aerodynamic characteristics of highly maneuverable configurations p0398 B82–22199

Review of the 1960 Wind-Tunnel/Flight Correlation Panel p0463 B82–25198

Current status of inlet flow prediction methods [AD–A11774] p0455 B82–26311

Prediction of fatigue crack growth rates under variable loading using a simple crack closure model [MFF–82–1023–0] p0529 B82–28685

Effect of water on axial flow compressors. Part 2: Computational program [AD–A14831] p0537 B82–29327

Effects of higher order control system on aircraft approach and landing longitudinal handling qualities p0563 B82–30848

A–362
Large displacements and stability analysis of nonlinear propeller structures
[NASA-TM-82850] p0572 A82-31707

PREDICTIONS

- Impact Prediction
- Linear Prediction
- Noise Prediction
- Performance Prediction

Evaluation of four subcritical response methods for on-line prediction flutter onset in wind tunnel tests — conducted in the Langley Transonic Dynamics Tunnel
[NASA-TM-72278] p0368 A82-23240

Prediction of aircraft handling qualities using analytical models of the human pilot
[NASA-TM-84223] p0396 A82-24208

Future trends and problems p0535 A82-29310

PREDICTORS

- Predictions
- Flight Analysis
- Nominally computers in the flight testing of the Fokker 729 aircraft p0138 A82-14839

PRESSURIZATION

- Heating Equipment
- Heating
- Preheating
- Preloading
- Pressurizing

Pressurized Flaps
Experimental study of the effects of secondary air on the emissions and stability of a lean premixed combuster
[AIAA PAPER 82-1072] p0415 A82-34992

Numerical and experimental examination of a prevaporized/premixed combuster
[AIAA PAPER 82-1079] p0416 A82-34994

Models for a turbulent premixed gaseous combuster
[AIAA PAPER 82-1216] p0435 A82-37709

PRESSURE

- Effect of fuel-air ratio nonuniformity on emissions of a subsonic combuster
[NASA-TP-1798] p0059 A82-13143

- Preparation

PREPOLYMERS

Studies of new perfluorocarbon elastomeric sealants — for aircraft fuel tanks
[NASA-CR-166377] p0560 A82-30400

PREFLOWS

Conductive prepregs for lightning strike protection on aircraft p0170 A82-20523

Mechanical properties of a fiberglass prepreg system at cryogenic and other temperatures
[AIAA J. 84-0708] p0335 A82-30099

PREPROCESSING

Digital image processing for acquisition, tracking, hand off and ranging
p0471 A82-27103

PRESSURE DISTRIBUTION

- Stagnation Pressure
- Static Pressure
- Wall Pressure
- Wind Pressure

PRESSURE CABIN

- Pressure CABINs

PRESSURE CHAMBERS

- Pressure Dependence

Pressure dependence of jet noise and silencing of blow-offs
p0167 A82-20266

PRESSURE DISTRIBUTION

The use of the Weber method for minicomputer-assisted numerical analysis of airfoils
p0005 A82-10362

Subsonic flow over airborne optical targets
p0114 A82-17605

Optimal subsonic diffuser wall design for arbitrary entry conditions
[AIAA PAPER 82-0132] p0115 A82-17800

Pressure distribution on an ogee wing in supersonic flow
[AIAA PAPER 82-0414] p0121 A82-17934

Calculation of the unsteady loads on the surface of a moving wedge with an incident shock wave
p0126 A82-18550

Use of high conical flow theory for the determination of the pressure distribution on the wave rider and its agreement with experimental results for supersonic flow
p0150 A82-19197

Experimental investigation of a jet inclined to a subsonic crossflow
[AIAA PAPER 81-2510] p0155 A82-19202

Recent advances in applying Free Vortex Sheet theory to the estimation of vortex flow aerodynamics
[AIAA PAPER 82-0095] p0183 A82-22045

Subsonic aerodynamic and flutter characteristic of several wings calculated by the SOUSSE F1.1 panel method
p0341 A82-30193

Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser
p0378 A82-32330

Design and investigations of a three dimensionally twisted diffuser for centrifugal compressors
[ASME PAPER 82-02-102] p0424 A82-35339

Joint Anglo-American experience of the analysis of helicopter rotor blade pressure distribution
p0490 A82-37770

Experimental and theoretical studies of three-dimensional turbulent boundary layers on an empennage of a typical transport airplane
p0511 A82-40955

Study on pressure distribution on rotor blades with three-dimensional nonsteady theory of compressible fluid
p0577 A82-45188

Aerodynamic calculations and design of subcritical airfoils
p0032 A82-10983

Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure
p0032 A82-11006

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion
p0032 A82-11007

A comparison of theoretical and experimental pressure distributions for two advanced fighter wings
[NASA-TM-81311] p0035 A82-11054

Subcritical and supercritical airfoils for given pressure distribution
p0085 A82-12031

Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70.
Volume 1: Trapezoidal tail
[NASA-TM-80097] p0098 A82-13110

Separated flow around helicopter bodies
p0250 A82-18163

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with
Improved vane-island diffusers at high swirl
[ASME PAPER 82-GT-68] p0023 A02-35318
Development and application of a performance prediction method for straight rectangular diffuser
[ASME PAPER 82-GT-122] p0045 A02-35352

PRESSURE REDUCTION
Thermal and flow analysis of a convective, air-cooled ceramic coated porous metal concept for turbine vanes
[ASME PAPER 81-HT-48] p0012 A02-10952
Determination of losses in a channel with a sudden expansion behind a diffuser
p0208 A02-26492
Analysis of the characteristics of a bypass engine, with allowance for variable pressure losses in the channels
p0208 A02-26496
Optimization of compressor vanes and bleed settings
[ASME PAPER 82-GT-81] p0043 A02-35327
Optimization of compressor vane and bleed settings
[AD-A106059] p0138 A02-14097
Part span damper loss prediction for transonic axial fan rotors
p0205 A02-17192
A research program to reduce interior noise in general aviation aircraft. Influence of depressurization and damping material on the noise reduction characteristics of flat and curved stiffened panels
[NASA-CR-169035] p0062 A02-27088
High pressure bleed for STOL and STO-VL performance: A conceptual examination
[AD-A115762] p0590 A02-32357

PRESSURE REGULATORS
Simulation of turbofan engine models in the Wezykridge low speed wind tunnel --- gas supply control
[BAE-INFN-NOE-46] p0319 A02-21212

PRESSURE SENSORS
Calibration of seven-hole probes suitable for high angles in subsonic compressible flows
[ASME PAPER 82-0410] p0121 A02-17931
Pressure transducer calibration process
[ASME PAPER 011076] p0233 A02-24408
Investigation of the transonic calibration characteristics of turbine static pressure probes
[ASME PAPER 82-GT-280] p0430 A02-35454
Analysis and wind tunnel tests of a probe used to measure altitudes through measurement of static pressure
[ASME PAPER 82-1361] p0489 A02-36128
Simulation of jet engine systems as a fuel saving aid in jet transport aircraft operation --- n-300 and a-310 aircraft
p0492 A02-25181
Real time pressure signal system for a rotary engine
[NASA-CASP-LER-13622-1] p0543 A02-26294

PRESSURE TRANSDUCERS
U PRESSURE SENSORS
PRESSURE WELDING
UT DIFFUSION WELDING
UT ULTRASONIC WELDING

PRESSURIZED CABINS
Air supply system data for Boeing 767 airplane --- Built-In-Test-Equipment
[ASME PAPER 81-EAAS-7] p0111 A02-10895
USAF bioclimatic environmental stress data handbook: Volume 168: E-3 tester, pressurized cabin leakage, aircraft
[AD-A116153] p0602 A02-33163

PRESTRESS TUBES
U PrestoTubes
U PISTON TUBES
U SPEED INDICATORS

PRESTRESSING
U PRESTRESSING

PRESTRESSING
Development of a preloaded hybrid advanced composite wing pivot fastening
p0287 A02-27131
Experimental evaluation of squeeze film supported flexible rotor
[ASME PAPER 82-GT-233] p0024 A02-35315

PRETREATMENT
U PRESTRESSING
U PERTWISTING
U PRESTRESSING
U TWISTING

PREVAPORATION
Numerical and experimental examination of a prevaporized/prevaprated combustor
[ASME PAPER 82-1072] p0016 A02-34994

PREVENTION
UT ACCIDENT PREVENTION
UT CORROSION PREVENTION
UT FUSE PREVENTION
UT ICE PREVENTION

Prevention of aircraft protection during emergency escape at dynamic pressures up to 1600 Q
[AD-A117552] p0605 A02-33359

PRINTED CIRCUITS
Broader bandwidth for thin metal antennas
p0154 A02-19069
Improvement program for the C-141 Navigation Selector Panel
[AD-A114669] p0048 A02-25248

PRINTERS
UT PRINTERS (DATA PROCESSING)

Printers (Data Processing)
High-speed rotary printing device for air traffic control applications: A preliminary evaluation
[AD-A107325] p0466 A02-27264

PRIVATE AIRCRAFT
UT GENERAL AVIATION AIRCRAFT

PROBABILITY
UT PROBABILITY THEORY
UT PROBABILITY DENSITY FUNCTIONS
UT BAYESIAN DISTRIBUTION

Probability of a probability-density-function curve and F-maps in composite-material inspection
p0277 A02-28934

PROBABILITY DISTRIBUTION FUNCTIONS
UT THE distribution
The structure of a separating turbulent boundary layer. I - Mean flow and Reynolds stresses. II - Higher-order turbulence results
p0129 A02-18776
A result in the theory of spiral search
[AD-A112461] p0466 A02-27262

PROBABILITY THEORY
UT EXTENDING THE LIMITS OF RELIABILITY THEORY
The Shiryaev sequential probability ratio test for redundancy management
[AD-A16-263] p0468 A02-39999
Stage-state reliability analysis technique
p0196 A02-17104

PROBLEM SOLVING
UT ASTROPHYSICS METHODS
UT ITERATIVE SOLUTION
Development of integrated programs for aerospace vehicle design (IPAD) - IPAD user requirements
[NASA-CR-2905] p0141 A02-15034
A complete method for computation of blade mode characteristics and responses in forward flight
[SMIA5-B21-101] p0253 A02-22254
The numerical solution of the Navier-Stokes equations for incompressible turbulent flow over airfoils
[AD-A111279] p0460 A02-26612

PROCEDURES
UT CASE PROCEDURES (INFLIGHT)
UT FINITE ELEMENT METHOD
UT FINITE VOLUME METHOD
UT PANEL METHOD (FLOID DYNAMICS)

Proposed standard requirements and procedures for icing clearance
p0566 A02-11061

PROCEDURES
UT TECHNICAL EVALUATION REPORT ON THE AEROSPACE TECHNOLOGY SYMPOSIUM
p0140 A02-15070

PROCESS CONTROL (INDUSTRIAL)
p0229 A02-24371

Applications of adaptive control systems --- to aircraft design, industrial processes and electrical drives
p0293 A02-27869

A-304
Fuel quality processing study, Volume 1
[NASA-CR-16527-VO!-1] p0399 882-24649
Fuel quality / processing study. Volume 2: Appendix 1. Literature survey

PROCESS Heat
Open-cycle vapor compression heat pump
[PB82-110503] p0259 882-18553

PROCESSORS (COMPUTERS)
Central Processing Units

PROJECT MANAGEMENT
ST GOVERNMENT PROJECT MANAGEMENT

PRODUCTION Costs
Skyship 500 - The development of a modern production airship
[p0174 882-20559]

PRODUCTION ENGINEERING
At Production Planning
Automated Paint and Process Line (APPL) --- for aircraft production
[NASA 81-2166] p0002 882-10120
Development of aircraft production engineering disciplines at IIT, Bombay
[p0013 882-11317]

Quality optimization and unification of aviation
[p0081 882-15721]

[p0229 882-24371]

Design and production of fiberglass helicopter rotor blades
[p0289 882-27153]

Transition of aerospace adhesive bonding technology from R&D to operational use
[p0293 882-27435]

Applications of structural adhesives in production
[p0326 882-28808]

British aerospace begins update effort
[p0378 882-32624]

The technology of the assembly of engines for flight vehicles --- Russian book
[p0578 882-45765]

The automation of processes for producing aircraft engines /2nd revised and enlarged edition/ --- Russian book
[p0578 882-45771]

A CFM teflon for the Tornado: Construction and production --- horizontal stabilizer
[HRB-PE-212/KPK/PUB/2] p0027 882-10035
National production methods for the manufacture of helicopter rotor blades --- BO-105 helicopter
[HRB-00-312-80-06] p0316 882-21188
Directional solidification: Project B2 --- of gas turbine rotor blade alloys
[PPR-39088] p0356 882-22279
Specification and estimation of dynamic cost functions for airlframe production airframes
[AD-113147] p0463 882-27221

PRODUCTION METHODS
U PRODUCTION ENGINEERING

PRODUCTION PLANNING
Mission effectiveness of the AV-8B Harrier 2 could be improved if actions are taken now
[AD-111976] p0452 882-26284

PROFITABILITY
CIS/CAM approach to improving industry productivity gathers momentum
[p0181 882-21375]

PRODUCTIVITY

PROPRIETARY
A-346
subject index

flight avionics software [AIAA 81-2101] p0001 A82-10100
The design and implementation of a canned scenario function for the F-16 dynamic system simulator p0066 A82-16678
Formal specification and mechanical verification of GITF - a fault-tolerant flight control system p0436 A82-37446
F/1-16 weapons system support facilities p0198 A82-17120
A program testing assistant [AD-1081471] p0260 A82-16922
Combining analysis with optimization at Langley Research Center. An evolutionary process [NASA-TK-84472] p0400 A82-24046
programming (scheduling)
programming languages
Pascal

NT high level languages
NT PASCAL (PROGRAMMING LANGUAGE)
TURBOMAS - a programming language for the performance simulation of arbitrary gas turbine engines with arbitrary control systems [AIAA PAPERS 81-225-81] p0277 A82-35396
A simulation language approach to structural interaction problems p0610 A82-33750

programs
NT defense program
NT NASA programs
NT QUEST ENGINE PROGRAM
NT space programs
NT supersonic cruise aircraft research
NT tact program
NT terminal configured vehicle program
NT Tilt Rotors research aircraft program
NT university program

PROJECT MANAGEMENT
Implementation of AVRADEC MBST - for military aircraft parts production engineering p0009 A82-10565
Organizing and training for innovative flight test management [AIAA PAPER 81-2416] p0054 A82-13856
KC-10, flight test program management - The contractor's viewpoint [AIAA PAPERS 81-2380] p0064 A82-14380
The Federal Radiosonde Navigation Plan p0104 A82-16178
Management of a large avionics project p0105 A82-16557
Data systems organization - A change for the better - flight test data acquisition p0178 A82-20767
A310 - design for maintenance p0223 A82-24002
The aerospace learning process - review of some past projects [AIAA PAPER 82-1291] p0379 A82-33025
Engineering aspects of international collaboration on Tornado p0504 A82-40078
- Flight dynamics technology development:
  Structures and dynamics, vehicle equipment/subsystems, flight control and aeromechanics [AD-8096636] p0195 A82-17082
  A system safety model for developmental aircraft programs [NASA-CH-3536] p0350 A82-22220
PROJECT PLANNING
A survey regarding the German-French development program alpha Jet p0550 A82-43332

PROJECTILE CHAINING
Analysis methods for ballistic damage size and type p0202 A82-17163
PROJECTILE PRODUCTION
U terminal ballistics
PROJECTILES
MT hypervelocity projectiles

radar hostile fire location p0075 A82-14857
Sensor footprints and boxing range of terminal guidance munition [BMW-PAW-81-5] p0106 A82-15111
Design Manual for impact damage tolerant aircraft structure [NASA-AD-238] p0202 A82-17160
Description of projectile threats p0202 A82-17161
Analysis methods for predicting structural response to projectile impact p0202 A82-17162
Analysis methods for ballistic damage size and type p0202 A82-17163
Damage from high explosive (HE) projectiles p0202 A82-17164
Damage from engine debris projectiles p0202 A82-17165
Effects of cyclic loading on projectile impact damage p0202 A82-17167
Stiffness degradation of impact damaged structure p0203 A82-17168
Strength degradation of impact damaged structure p0203 A82-17169

PROP-FAN TECHNOLOGY
Propellers come full circle -- prop-fan technology for aircraft fuel savings p0433 A82-35881
Propulsion/AECE [NASA-PACTS-91/8-81] p0408 A82-25251
Advanced turboprop tested systems study. Volume 1: Tested program objectives and priorities, drive system and aircraft design studies, evaluation and recommendations and wind tunnel test plans [NASA-CR-167928-VOL-1] p0591 A82-32370
Advanced turboprop tested systems study [NASA-CR-167895] p0607 A82-33375

PROPAGATION (EXTENSION)
NT Crack Propagation
NT Plane Propagation

Propagation modes

PROPELLER ADDITIVES
Antiseize properties of additives based on higher fatty acids -- for jet fuels p0548 A82-42893

PROPELLER CORROSION
NT Solid Propellant Corrosion
NT Propellant Decomposition

Deposit formation in hydrocarbon fuels [NASA-PAPER 82-94-69] p0422 A82-35307
Deposit formation in hydrocarbon fuels [NASA-Paper 82-GT-49] p0422 A82-35307

PROPELLER EXPLOSIONS
Gunfire blast pressure predictions p0345 A82-22170

PROPELLER PROPERTIES
Aviation turbine fuel properties and their trends p0163 A82-19623
NASA/General Electric broad-specification fuels combustion technology program - Phase I results and status [AIAA PAPER 82-1099] p0416 A82-35000

PROPELLERS
MT Cryogenic Rocket Propellants
MT Liquid Rocket Propellants
MT H-1 Rocket Propellants
MT Solid Propellants

Propeller blades
Resonant whirling of aircraft propeller-engine systems p0105 A82-16417
Optimization of propeller blade shape by an analytical method [AIAA PAPER 82-1125] p0417 A82-35021
The application of small propellers to RPV propulsion p0493 A82-39737
An analysis of civil aviation propeller-to-person accidents: 1965-1979 A-387
Experimental methods for the prediction of the effect of viscosity on propeller performance

(AIAA PAPER 82-0957) p0374 N82-31933

Propulsion opportunities for future consumer aircraft

(AIAA PAPER 82-1049) p0497 A82-40418

Summary and recent results from the NASA advanced high-speed propeller research program

(AIAA PAPER 82-1119) p0497 A82-40419


p044 A82-42035

Noise of the SR-3 propeller model at 2 deg and 4 deg angle of attack

(AIAA-TM-82-6738) p0194 A82-16808

A shock wave approach to the noise of superersonic propellers

(AIAA-TM-82-7525) p0194 A82-16809

An extension of the local momentum theory to the rotors operating in twisted flow fields

p0245 N82-18123

Annoyance caused by propeller airplane flyover noise: Preliminary results

(AIAA-TM-8264) p0250 N82-18996

Collection and evaluation of propeller aircraft flyover noise certification data

p0470 A82-19598

A preliminary comparison between the SR-3 propeller in flight and in a wind tunnel

(AIAA-TM-82-2805) p0322 A82-21998

Experiments on propeller noise

p0359 A82-22978

Future propulsion opportunities for consumer airplanes

(AIAA-TM-82680) p0396 N82-24203

The vibratory behavior of a rotating propeller shaft. Part 4: Vibration tests of a rotating propeller shaft in a rubber stern tube bearing of ship propellers

[WECO-0572268-81-PT-2] p0308 A82-22222

Summary and recent results from the NASA advanced high speed propeller research program

p047 A82-26219

Propulsion opportunities for future consumer aircraft

(AIAA-TM-82-62915) p045 A82-26296

On the design and test of a low noise propeller

(AIAA-CASE-LAB-12630-1) p0356 A82-29319

Use of the cavitation tunnel at the Dutch Naval Experiment station (NSP), Wageningen for the determination of the acoustic source strength of propeller cavitation

(TPD-900-720) p0530 N82-29116

Flow and pressure field of a model propeller

(AIAA-TM-7630) p0557 N82-30290

Larger displacements and stability analysis of nonlinear propeller structures

(AIAA-TM-82680) p0572 A82-31707

Rough analysis of installation effects on turboprop noise

(AIAA-TM-82-2924) p0574 N82-32302

Computer prediction of three-dimensional potential flow fields in which aircraft propellers operate

(AIAA-CASE-LAB-12630) p0585 N82-32312

Propeller flow visualization techniques

p0597 A82-32672

In-flight propeller flow visualization using fluorescent materials

p0597 A82-32673

Development of a laser velocimeter for a large transonic wind tunnel

p0598 N82-32688

LP measurements with an advanced turboprop

p0598 N82-32690
Provision System Performance

Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center

[HASA-TH-800523] p0006 882-333149

Evaluation of noise control technology and alternative noise certification procedures for powered-driven small airplanes

[HASA-TH-810160] p0600 882-333151

Proportional Control

Extension of proportional navigation by the use of optimal filtering and control methods

[ESA-TH-683] p0253 882-181999

Propulsion

A tactical display aid for primary flight training

[HASA-CH-166262] p0351 882-222328

Jet V/STOL wind-tunnel simulation and groundplane effects

A piecewise linear state variable technique for real time propulsion system simulation

[HASA-TH-82051] p0042 882-116064

Propulsion System Configurations

Performance calibration results for a Compact Multimission Aircraft Propulsion Simulator

[AIAA PAPER 82-0254] p0110 882-178666

Vertical takeoff technology - Flight mechanics, aerodynamics, and propulsion systems --- German book

[AO-882-33348] p0361 882-231565

NASA research in aircraft propulsion

[AO-882-35389] p0246 882-35389

The role and implementation of different nacelle/engine simulation concepts for wind-tunnel testing in research and development work on transport aircraft

[AO-882-13086] p0095 882-13086

Helicopter propulsion systems: Past, present and future

[AIAA PAPER 81-12166] p0100 882-12166

Future technology and requirements for helicopter engines

[AO-882-17206] p0206 882-17206

Advanced Component development design basis for next generation medium power helicopter engines

[AO-882-17207] p0207 882-17207

Component research for future propulsion systems

[AO-882-17209] p0207 882-17209

Future requirements for helicopter propulsion systems

[AO-882-17220] p0209 882-17220

A propulsion view of the all-electric airplane

[AO-882-19136] p0246 882-19136

Optimization of thrust algorithm calculation for Computing System (TCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HMAT) vehicle's propulsion system

[HASA-CH-163121] p0037 882-21998

The role of modern control theory in the design of controls for aircraft turbine engines

[HASA-TH-820615] p0354 882-22262

Future propulsion opportunities for composite airplanes

[HASA-TH-820600] p0306 882-24203

Experimental determination of flow-interference effects of wing-mounted, two-dimensional, full-capture propulsion nacelles as close to proximity to a vehicle body at a Mach number of 6

[HASA-TH-813287] p0405 882-25217

New developments in the field of ramjet missile propulsion

[AB-882-051-61-0] p0409 882-25260

Evaluation of an experimental technique to investigate the effects of the engine position

on engine/pylon/wing interference --- wind tunnel tests

[BA-882-01020-0] p0521 882-28262

Development of a rotocraft. Propulsion dynamics interface analyses, Volume 1

[HASA-CH-166380] p0591 882-32368

Development of a rotocraft. Propulsion dynamics interface analyses, Volume 2

[HASA-CH-166381] p0591 882-32369

Provision System Performance

Advancing blade concept ABC/development test program

[AIAA PAPER 81-2977] p0055 882-13073

Recent propulsion system flight tests at the NASA Dryden Flight Research Center

[AIAA PAPER 81-2978] p0055 882-13074

NASA V/STOL Propulsion Control Analysis - Phase I and II program status

[AIAA PAPER 81-2632] p0104 882-16908

V/STOL propulsion control technology

[AIAA PAPER 81-2634] p0104 882-16909

A real time Pegasus propulsion system model for V/STOL piloted simulation evaluation

[AIAA PAPER 81-2636] p0159 882-19221

Operational and performance aspects of fuel management in civil aircraft

[AO-882-20510] p0169 882-20510

Advanced subsonic transport propulsion

[AIAA PAPER 81-0811] p0100 882-20874

Propulsion system controls design and simulation

[AO-882-22299] p0105 882-22299

Propulsion multiplexer /PHOX/ system - The missing link

[HASA-TH-811076] p0233 882-24411

The TM 333, a trap card for Turbofoce

[AO-882-33750] p0384 882-33750

Charting propulsion's future - The ATS results --- Advanced Technology Engine Studies program for aircraft engine design

[AIAA PAPER 82-1139] p0417 882-35023

Design concepts of an advanced propulsion monitoring system

[AIAA PAPER 82-1130] p0438 882-37690

Supersonic missile aerodynamic and performance relationships for low observables mission profiles

[AIAA PAPER 82-1298] p0467 882-39085

Mini-BPV propulsion

[AO-882-39736] p0493 882-39736

The application of small propellers to BVP propulsion

[AO-882-39737] p0493 882-39737

Electric propulsion for a mini BVP system

[AO-882-39744] p0494 882-39744

Propulsion opportunities for future compound aircraft

[AIAA PAPER 82-1049] p0497 882-40418

Summary and recent results from the NASA advanced high-speed propeller research program

[AIAA PAPER 82-1119] p0497 882-40419

Civil helicopter propulsion system reliability and engine monitoring technology assessments

[AO-882-40518] p0499 882-40518

Aerodynamic concepts for fuel-efficient transport aircraft

[AO-882-40519] p0499 882-40519

An improved propulsion system simulation technique for advanced fighter aircraft

[AO-882-40510] p0511 882-40517


A look inside the Langley 16-foot transonic tunnel: User's guide

[HASA-TH-81380] p0089 882-12085

Influence of correlations and computational methods on the prediction of overall efficiency

[AO-882-17180] p0204 882-17180

Survey on the effect of blade surface roughness on compressor performance

[AO-882-17191] p0205 882-17191

Axial compressor stall and surge

[AO-882-17194] p0205 882-17194

Helicopter propulsion systems: Past, present and future

[AO-882-17204] p0206 882-17204
PROPELLER EFFICIENCY

Aircraft turbine engine development: Current practices and new priorities
Future technology and requirements for helicopter engines
Mechanical advances in the design of small turboshaft engines
Advanced component development design basis for next generation medium power helicopter engines
Aerodynamic components for small turboshaft engines
Regenerative helicopter engines: Advances in performance and expected development problems
Advanced transmission component development
Prediction of off-design performance of turbo-shaft engines a simplified method
Three-engine control system for the prototype EH-101 helicopter
NASA/NASA Advanced Rotocraft Technology and Tilt Rotor Workshop, Volume 5: Propulsion Systems Simulation
A piezoelectric linear state variable technique for real time propulsion system simulation
Problems in correlation caused by propulsion systems
Summary and recent results from the NASA advanced High Speed Propulsion Research Program
Propulsion opportunities for future combat aircraft
Integrated airframe propulsion control

PROPELLER EFFICIENCY

NT PROPELLER EFFICIENCY

An investigation of the use of a propulsive wing/boom concept for improved maneuvering:
[AIAB PAPER 81-2622]
The design of compact asymmetric maximum-thrust nozzles for a given lift force
Design possibilities for improved fuel efficiency of civil transport aircraft
Airbus Industrie - the year of progress
System study of application of composite materials for future transport aircraft
[AIAB PAPER 82-0612]
Optimization of propeller blade shape by an analytical method
[AIAB PAPER 82-1125]
The application of small propellers to AVP propulsion
Aircraft design for fuel efficiency
[AIAB PAPER 82-0597]
Quiet short-haul research aircraft familiarization
[NASA-TR-801298]
Propeller study for Small Transport Aircraft Technology (STST) Appendix B
[NASA-CR-165499-APP-B]
Mechanical advances in the design of small turboshaft engines
[AIAB PAPER 82-17208]
The distress regime on the turboshaft helicopter

PROTECTION

NT ACCELERATION PROTECTION
NT CIRCUIT PROTECTION
NT CORROSION PREVENTION
NT THERMAL PROTECTION

Electrical ground testing of aircraft antistatic protection
[AIAB PAPER 82-19156]

SUBJECT INDEX

Protection of advanced electrical power systems from atmospheric electromagnetic hazards
[AD-112612]
Carbon fiber reinforced composite structures protected from metal surfaces against lightning strike damage
[ARB-U-95-62-02-08]

PROTECTIVE CLOTHING

Human response to fire
[AIAB PAPER 82-29281]

PROTECTIVE COATINGS

NT CHLORIC COATINGS
The protection of gas turbine blades - a platinum alminide diffusion coating
[AIAB PAPER 82-13646]
Abrasion resistant coated plastic products for aircraft
[AIAB PAPER 82-24310]
An evaluation of several polymers for high density humidity PC coatings
[AIAB PAPER 82-27432]
Recent developments in materials and processes for aircraft corrosion control
[AIAB PAPER 82-27466]
An evaluation study of aluminide and chromaluminide coatings on Z=100
[AIAB PAPER 82-29597]
Engine experience of turbine rotor blade materials and coatings
[AIAB PAPER 82-35425]
Application and testing of metallic coatings on graphite/epoxy composites
[AIAB PAPER 82-37074]
Thermal-barrier coated turbine blade study
[NASA-CR-16551]
Progress in protective coatings for aircraft gas turbines: A Review of NASA sponsored research
[NASA-TR-82740]
Corrosion prevention measures used in the construction of an aircraft airframe: The case of 2014 and 2174 alloys
[AIAB PAPER 82-17360]
Recent developments in materials and processes for aircraft corrosion control
[AIAB PAPER 82-17361]
New concepts in multifunctional corrosion for aircraft and other systems
[AIAB PAPER 82-17362]
Corrosion in naval aircraft electronic systems
[AIAB PAPER 82-17363]
Corrosion protection schemes for aircraft structures: Some examples for the corrosion behaviour of Al alloys
[AIAB PAPER 82-17364]
Coatings in the aero gas turbine --- sprayed coatings
[AIAB PAPER 82-21204]
The influence of protective treatment on the mechanical properties of superalloy parts
[AIAB PAPER 82-22180]
Protection of advanced electrical power systems from atmospheric electromagnetic hazards
[AD-112612]

PROTECTORS

A method for designing inlet distortion screens for aircraft gas turbine engine tests using an interactive computer program
[AD-1116584]

PROTOTYPES

A program report on the European Transonic Wind Tunnel Project
[ONERA, TP NO. 1981-121]
Design and production of fiberglass helicopter rotor blades
[AIAB PAPER 82-27153]
Status report of the USAF's Engine Model Derivative Program
[AIAB PAPER 82-0618]
Evaluation of CFP prototype structures for aircraft
[AIAB PAPER 82-35391]
Fabrication of CFP prototype structure for aircraft horizontal tail leading edge tilt tail
[AIAB PAPER 82-39892]
Three-engine control system for the prototype EH-101 helicopter
[AIAB-95-1561L]
A Loran-C prototype navigation receiver for general aviation
[AIAB-CR-169116]

A-350
BACOI BBACOIS QUALITY COHIBOL QUALITY QUALITY

QUIET EIGIIE CBOGB1B QDBOBIH6 TBEOBI QUASILINBABITY

QUASI-STEADY STATES QUANTIZATION QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT OPTICAL BADAB NT BADAB BEACONS

NT DOPPLEB BADAB NT CONTINOOOS iAVE BADAB NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS

HI BIDING QUALITY NT SEABCH BADAB NT BADAB BEASOBEBENT NT BADAB BEACONS QOABfZ fBAISDOCBBS QUANTITATIVE ANALYSIS
SUBJECT INDEX

Discrete Address Beacon System /DABS/  
p0220 AB2-23322

Wide field of view laser beacon system for  
three-dimensional aircraft position measurement  
[DIGT PAPERS 11-VACDEC-8]  
p0224 AB2-24563

Secondary radar for airborne collisions avoidance  
p0301 AB2-30313

ATCRBS splink environment measurement near  
Jacksonville, Florida  
[AD-A1105053]  
p0188 H82-16063

Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance  
(ACS) threat phase  
[AD-A108678]  
p0203 H82-17166

Analysis of a nonlinear altitude tracking method  
[AD-A1116170]  
p0587 H82-32336

RADAR BEAMS  
Analysis and tolerance study of an array antenna  
for a new generation of secondary radar  
p0163 AB2-19521

RADAR CLUTTER MAPS  
Maximum-entropy spectral analysis of radar clutter  
p0594 AB2-57407

RADAR CROSS SECTIONS  
Performance considerations in the design of  
subsonic cruise missiles  
[AIAA PAPER 82-0371]  
p1012 AB2-17911

An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts  
[AIAA PAPER 82-0371]  
p1012 AB2-17912

The bomber that radar cannot see  
p0274 AB2-25874

Numerical applications of the physical optics  
approach for the calculation of radar cross  
sections of convex perfect scatterers  
[ARL-BSU-261]  
p0596 H82-32600

RADAR DATA  
Description of the meteorological research radar  
system aboard NOAA/Research Facilities Center  
WP-3D aircraft  
p0003 AB2-10217

Using phased array radar for data communications  
p0068 AB2-14725

Extended time radar raw video recording  
p0075 AB2-14909

RADAR DETECTION  
Instrumented aircraft verification of clear-air  
radar detection of low-level wind shear  
p0004 AB2-10221

Detection range analysis of an airborne medium PRF  
radar  
p0068 AB2-14723

Radar hostile fire location  
p0075 AB2-14857

Techniques for overhead wire detection --- to  
prevent helicopter wire strikes  
p1016 AB2-16560

The bomber that radar cannot see  
p0274 AB2-25874

Analysis of wide-looking airborne radar /SLAR/  
performance in the detection of search and  
rescue targets  
p0293 AB2-27874

Optimal target designation techniques  
[AD-A102937]  
p0293 AB2-27709

Distributed airborne array concepts  
p0302 AB2-31669

A multifrequency adaptive radar for detection and  
identification of objects - Results on preliminary experiments on aircrafts against a sea-clutter background  
p0379 AB2-32979

Doppler processing, waveform design and  
performance measures for some pulsed doppler and  
DFO-radar, II  
p0390 AB2-24671

Complete flexibility and realism in radar simulation  
p0482 AB2-20461

Demonstration of radar reflector detection and  
ground clutter suppression using airborne  
weather and mapping radar  
p0500 AB2-40532

Moving target Detector/Airport Surveillance radar  
(ASB-7) field evaluation  
[AD-A105196]  
p0950 H82-12303

Test and evaluation of the airport radar wind  
shear detection system  
[AD-A111663]  
p0478 H82-27924

RADAR DETECTION FINDERS  
U RADIO DIRECTION FINDERS

RADAR DISPLAYS  
U RADARSOURCES

RADAR ECHOES  
NT CLUTTER  
Secondary radar problems - The presence of false  
echoes  
p0242 AB2-25323

RADAR EQUIPMENT  
NT DISCRETE ADDRESS BEACON SYSTEM

NT RADAR ANTENNAS  
NT RADAR BEACONS

NT RADAR FILTERS  
NT RADAR RECEIVERS  
NT RADAR REFLECTORS

NT RADAR TRANSMITTERS

NT RADARSOURCES

Some Italian research for developing new primary  
ATC radars  
p0071 AB2-14775

Management of a large aerospace project  
p0105 AB2-16544

Airport radar systems  --- Russian book  
p0150 AB2-19245

Simulation of modern radar installations in  
full-mission flight and tactics simulators  
[DGLR PAPER 81-103]  
p0160 AB2-19272

An accurate Doppler navigator with microwave  
simplicity  
p0435 AB2-37037

Radar for UMA  
p0494 AB2-37462

The choice of technology for ATC radar. I -  
Transmitters  
p0581 AB2-45981

Terminal air traffic control with surveillance  
data from the mode S system: Results of system  
demonstrations to field controllers  
[AD-A112632]  
p0467 AB2-27268

RADAR FILTERS  
Some Italian research for developing new primary  
ATC radars  
p0071 AB2-14775

RADAR HOOKING KISSLERS  
Microwave systems for radar guided missiles  
p0150 AB2-18936

RADAR IMAGERY  
Inverse SAR and its application to aircraft  
classification  
p0075 AB2-14071

RADAR MAPS  
NT RADAR IMAGERY

Simulation of modern radar installations in  
full-mission flight and tactics simulators  
[DGLR PAPER 81-103]  
p0160 AB2-19272

Demonstration of radar reflector detection and  
ground clutter suppression using airborne  
weather and mapping radar  
p0500 AB2-40532

Radar mapping, archaeology, and ancient use  
in the Maya lowlands  
[NASA-CR-160931]  
p0041 H82-11514

RADAR MEASUREMENT  
Multiple Doppler radar observations of PBL structure  
p0004 AB2-30292

Airborne lidar measurements of smoke plume  
distribution, vertical transmission, and  
particle size  
p0181 AB2-21386

Airborne lidar measurements of the Soufriere  
eruption of 17 April 1979  
p0383 AB2-33657

Two-frequency /Heliborne microwave scattering  
measurements of ocean wave spectra from an  
aircraft  
p0584 AB2-47493

A-353
Radar Navigation

Baseline monitoring using aircraft laser ranging
--- aerospaceborne laser simulation and aircraft laser tracking
[AD-A1185463] p0149 A82-18903
Remote sensing of turbine engine gases
[AD-A1187664] p0077 A82-27904

Radar Navigation

Evaluating sources of error in EAR/GEAMS navigation using a Kalman postprocessor --- Electronically Agile Radar/Gimballed Electrically suspended gyro Airborne Navigation System
[AD-A1187664] p0068 A82-14723

Short-term behavior of a Doppler navigation system and comparison with position indication by means of scanning radar
[AD-A1187664] p0149 A82-18903

Marine Air Traffic Control and Landing System (MATCALs Investigation), volume 1
[AD-A1187664] p0149 A82-18903

Marine Air Traffic Control and Landing System (MATCALs Investigation), volume 2
[AD-A1187664] p0149 A82-18903

Radar Observation

U Radar Tracking

Radar Range
Detection range analysis of an airborne medium PBF radar
p0068 A82-14723

Radar Receivers

Performance evaluation of target report extractor in the monopulse AFCS --- Air Traffic Control Radar Beacon System
p0077 A82-14938

Radar Reflectors

U Radar Echoes

Demonstration of radar reflector detection and ground clutter suppression using airborne weather and mapping radar
p0500 A82-40532

Radar Resolution

F-15 SAAB
p0077 A82-14938
Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability
p0500 A82-40532

Radar Scanning

Scanning strategies for air traffic control radars
p0235 A82-24646
Comparison between the surveillance performances of the Air Traffic Control Radar Beacon System node of the Mode S and the Automated Radar Terminal System
[AD-A1187664] p0450 A82-26273

Design and implementation of efficient algorithms for automatic determination of corrected slant range
[AD-A1187664] p0457 A82-27267

Radar Scattering

Commercial airborne weather radar technology
p0075 A82-14868
Modelling of target radar scattering with application to guidance simulation
p0175 A82-20570

Comparison of various elevation angle estimation techniques
p0175 A82-20570

Radar Signatures

Main rotor hub electromagnetic signature reduction
p0279 A82-26393

Radar Targets

Detection range analysis of an airborne medium PBF radar
p0068 A82-14723

Evaluation of advanced air-to-air gunnery fire control systems
p0069 A82-14750

A new approach to radar plot extraction for ATC applications
p0075 A82-14908

Tactical Radar Threat Generator system
p0149 A82-18903

Design criteria for a miss distance radar
p0149 A82-18904

Modelling of target radar scattering with application to guidance simulation
p0175 A82-20570

Synthetic aperture radar target simulator
[AD-A1187664] p0131 A82-10286

Moving target detector (Mod 2)
[AD-A1187664] p0539 A82-29520

Radar Tracking

Hard limited approaches to correlation velocity sensing
p0222 A82-12636

Radar hostile fire location
p0075 A82-14908

Air-to-ground STI radar using a displaced phase center, phased array
p0075 A82-14908

A new approach to radar plot extraction for ATC applications
p0075 A82-14908

Post-flight assessment of the JTIDS Rel Nav
p0124 A82-18154

Tactical Radar Threat Generator system
p0149 A82-18903

Microwave communications to remotely piloted vehicles
p0150 A82-18911

Experimental measurement of the low angle terrain sensing interference environment
p0175 A82-20588

Comparison of various elevation angle estimation techniques
p0175 A82-20588

Tracking of low-altitude targets by a combined X/Ka-band radar system
p0175 A82-20589

Stereo graphic projection in the National Airspace System
p0175 A82-20589

Optimal target designation techniques
p0293 A82-27709

The PATHFINDER radar in tactical air defense
p0435 A82-37035

C band spectral tracking for FM/CW altimetry
p0435 A82-37035

Analysis of general-aviation accidents using ATC radar records
[AD-A117640] p0497 A82-39091

Target tracking using area correlation
p0190 A82-39194

Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability
p0500 A82-40531

Research on an adaptive Kalman filter for solving the radar tracking problem --- German thesis
p0500 A82-40531

Use of aircraft-derived data to assist in ATC tracking systems, I - Accuracy and theoretical considerations
p0506 A82-62504

Altitude estimation using asynchronous alpha-beta tracking filters
p0582 A82-46387

Detection and tracking algorithm refinement
[AD-A1185517] p0175 A82-20154

Modeling of a tracking radar in terms of a nonlinear second order phase lock loop
[AD-A1185517] p0596 A82-32580

Implementable differential equations for nonlinear filtering --- radar tracking
[PLL-SP-81037 0] p0600 A82-33120

Improving conflict awareness in the aviation domain using moving target detector data
[AD-A1187664] p0607 A82-33370

Memory and computational requirements for tracking in the advanced computer system
[AD-A1187664] p0612 A82-33619

Radar Transmission

Hover Jam - US Army studies EW helicopter
p0059 A82-18914

A new class of routing protocols for a proposed computer network linking tactical radar sites
p0553 A82-63893

Radar Transmitters

L-band power generation in the General Electric solid-state radar
p0150 A82-18914

Radarcopes

A new approach to radar plot extraction for ATC applications
p0075 A82-14908

A-354
The development of terrain following displays for the Tornado aircraft... p0387 N82-32337
RADAR FLOW
A critical appraisal of some current incidence... [ASME PAPER 82-GT-120] p0425 A82-35350
Calculation of level flow using radial grating... p0384 A82-36922
Cooled variable source radial turbine for rotor... [NASA-CR-165397] p0536 N82-29323
RADIANCE
Airborne measurements of European sky and terrain... (AD-A116637) p0562 N82-30782
RADIANT FLUX DENSITY
ST LUMINANCE
ST RADIENCE
ST RADIANCE
Determination of vertical profiles of aerosol size... p0020 N82-12149
Fuel property effects on radiation intensities in a gas turbine combustor... p0166 N82-19966
RADIANT INTENSITY
[ST RADIANT FLUX DENSITY
RADIATION ABSORPTION
ST ATMOSPHERIC ATTENUATION
RADIATION CHEMISTRY
Radiation/catalytic augmented combustion... (AD-A112376) p0375 N82-27434
RADIATION COURSES
ST SCINTILLATION COURSES
RADIATION DETECTORS
RADAR simulator for aircraft instruments... [POA-C-40136-A3] p0356 N82-22286
RADIATION DISTRIBUTION
ST ANTENNA RADIATION PATTERNS
ST DIFFRACTION PATTERNS
Collection and simulations of spatial infrared... [AAIA PAPER B1-2494] p0058 N82-13921
RADIATION BEAMS
ST RADIANT FLOW DENSITY
RADIATION MEASURING INSTRUMENTS
ST DICE RADIO METERS
ST ELECTROMAGNETIC PHOTOS
ST PLER DETECTORS
ST IMPERFECT DETECTORS
ST IMPERFECT RADIO METERS
ST IMPERFECT SPECTROMETERS
ST MICROWAVE RADIO METERS
ST RADIATION DETECTORS
ST SCINTILLATION COURSES
RADIATION NOISE
ST ELECTROMAGNETIC NOISE
RADIATION PRESSURE
ST LUMINANCE
ST SOUND PRESSURE
RADIATION SOURCES
ST PHOTON SOURCES
ST POINT SOURCES
RADIATION SPECTRA
ST ABSORPTION SPECTRA
ST EMISSION SPECTRA
ST VIBRATIONAL SPECTRA
ST VISUAL SPECTRA
RADIATION HEAT TRANSFER
Modeling solid-fuel rocket combustion including... [AD-A107852] p0441 N82-25424
RADIATIVE TRANSFER
RADAR HIGHT TRANSFER
TERRAIN ACTUATED DEPLOYMENT SYSTEMS
Terrain actuated deployment system --- radar... p0080 A82-19982
C band spectral tracking for FRN altimeter... p0435 N82-37035
RADIO EQUIPMENT
The use of groundspeed, in a wind shear and the... p0066 N82-14699
Distributed Time Division Multiple Access... [DTDMA] p0466 N82-25424
High-accuracy ranging over voice radios for downed... p0466 N82-14699
Tactical Environment... [AD-A107150] p0450 N82-26275
Traffic radio channel control equipment: Change 1... [DTDMA] p0466 N82-26275
Radio direction finding... p0578 N82-26275
Passive direction finding and signal location... [AD-A104156] p0562 N82-29323
The statistical theory of radio direction finding... [AD-A104156] p0523 N82-29323
Minimum operational performance standards for...[ETCA/DO-179] p0523 N82-28270
Federal navigational plan. Volume 3; Navigational system characteristics... p0567 N82-33234
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>BADOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications of a multiplexed GPS user set</td>
<td>ST IONOSPHERIC PROPAGATION</td>
</tr>
<tr>
<td>FAA tests on the Navstar GPS S-set</td>
<td>ST MICROWAVE TRANSMISSION</td>
</tr>
<tr>
<td>A prototype interface unit for microprocessor- based Loran-C receiver</td>
<td>ST MULTIPLE TRANSMISSION</td>
</tr>
<tr>
<td>[NASA-CS-165687]</td>
<td>ST SPREAD SPECTRUM TRANSMISSION</td>
</tr>
<tr>
<td></td>
<td>ST TRANSMISSION RADIO PROPAGATION</td>
</tr>
<tr>
<td>A possible way of specifically correcting location and navigational errors caused by reflection and other propagation anomalies</td>
<td>Updated station deselection procedures to support automatic Omega receiver operation</td>
</tr>
<tr>
<td>[ESA-10-067]</td>
<td>p0253 A82-18196</td>
</tr>
<tr>
<td>TR/VR polarization ratios in a sample of 30 kHzuffle received at altitudes from 0 to 70 km</td>
<td>Long-range radio NAVDHAL signal reliability</td>
</tr>
<tr>
<td>[AD-A108182]</td>
<td>p0258 A82-18446</td>
</tr>
<tr>
<td>FAA broadcast interference related to airborne ILS, VOR and VHF communications</td>
<td>Passive direction finding and signal location</td>
</tr>
<tr>
<td>[NASA/DO-176]</td>
<td>p0268 A82-19419</td>
</tr>
<tr>
<td>Investigation of technical requirements</td>
<td>p0218 A82-24355</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigation of the effects of airborne installation factors on receiver interference</td>
<td></td>
</tr>
<tr>
<td>Computer-program model for predicting horizontally and vertically polarized VHF atmospheric radio noise at elevated receivers</td>
<td></td>
</tr>
<tr>
<td>[AD-A109448]</td>
<td></td>
</tr>
<tr>
<td>A Loran-C prototype navigation receiver for general aviation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Consulated automatic gain control system</td>
<td></td>
</tr>
<tr>
<td>A prototype interface unit for microprocessor-based Loran-C receiver</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>A Loran-C prototype navigation receiver for general aviation</td>
<td></td>
</tr>
<tr>
<td>[NASA-CS-169116]</td>
<td></td>
</tr>
<tr>
<td>Doppler test results of experimental GPS receiver</td>
<td></td>
</tr>
<tr>
<td>[AD-A113587]</td>
<td></td>
</tr>
<tr>
<td>A balanced active antenna and impulse noise blanket system for the Beidsit T radio navigation receiver</td>
<td></td>
</tr>
<tr>
<td>[AD-A1104074]</td>
<td></td>
</tr>
<tr>
<td>Airborne Flight Test System (AFTS)</td>
<td></td>
</tr>
<tr>
<td>[AD-A115459]</td>
<td></td>
</tr>
<tr>
<td>RADIO BAY SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>AT TIME DIVISION MULTIPLE ACCESS</td>
<td></td>
</tr>
<tr>
<td>A mathematical model of an over-sea airborne VHF radio link</td>
<td></td>
</tr>
<tr>
<td>Relay-augmented data links in an interference environment</td>
<td></td>
</tr>
<tr>
<td>p0016 A82-11406</td>
<td></td>
</tr>
<tr>
<td>Beyond the horizon coverage for air navigation/traffic control</td>
<td></td>
</tr>
<tr>
<td>p0176 A82-20684</td>
<td></td>
</tr>
<tr>
<td>VHF radio link for ground-air-ground communications using an integrated voice-data modulation</td>
<td></td>
</tr>
<tr>
<td>p0235 A82-24647</td>
<td></td>
</tr>
<tr>
<td>Electromagnetic Propagation Problems in the Tactical Environment</td>
<td></td>
</tr>
<tr>
<td>[AGARD-LS-120]</td>
<td></td>
</tr>
<tr>
<td>RADIO SCATTERING</td>
<td></td>
</tr>
<tr>
<td>A possible way of specifically correcting location and navigational errors caused by reflection and other propagation anomalies</td>
<td></td>
</tr>
<tr>
<td>[ESA-TZ-667]</td>
<td></td>
</tr>
<tr>
<td>RADIO SIGNAL ATTENUATION</td>
<td></td>
</tr>
<tr>
<td>U RADIO ATTENUATION</td>
<td></td>
</tr>
<tr>
<td>A RADIO SIGNAL PROPAGATION</td>
<td></td>
</tr>
<tr>
<td>A RADIO TRANSMISSION</td>
<td></td>
</tr>
<tr>
<td>RADIO TELEMETRY</td>
<td></td>
</tr>
<tr>
<td>Recent developments in military telemetry</td>
<td></td>
</tr>
<tr>
<td>p0150 A82-18508</td>
<td></td>
</tr>
<tr>
<td>Selection of optimum antennas for tracking telemetry instrumented airborne vehicles</td>
<td></td>
</tr>
<tr>
<td>p0229 A82-27228</td>
<td></td>
</tr>
<tr>
<td>A single-frequency multitransmitter telemetry technique</td>
<td></td>
</tr>
<tr>
<td>p0036 A82-36281</td>
<td></td>
</tr>
<tr>
<td>RADIO TRACKING</td>
<td></td>
</tr>
<tr>
<td>Selection of optimum antennas for tracking telemetry instrumented airborne vehicles</td>
<td></td>
</tr>
<tr>
<td>p0290 A82-27228</td>
<td></td>
</tr>
<tr>
<td>The statistical theory of radio direction finding</td>
<td></td>
</tr>
<tr>
<td>[AD-A104156]</td>
<td></td>
</tr>
<tr>
<td>RADIO TRANSMISSION</td>
<td></td>
</tr>
<tr>
<td>ST IONOSPHERIC P-SCATTER PROPAGATION</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Automated radome performance evaluation in the Rado Frequency Simulation System /RFSS/ facility at APL

The effect of radome scattering on ECH antenna patterns

[AD-A1115517]

Study of the deicing properties of the SBDR-3 rotodome

[AD-A115405]

RAID MODES

RAIL TRANSPORTATION

Comparing the relationships between noise level and annoyance in different surveys - a railway noise vs. aircraft and road traffic comparison study.

Helical rail glider launcher

[AD-A115445]

HELICOPHERS

V / TAIL TRANSPORTATION

Airborne weather radar and severe weather penetration

Heavy rain/wind shear accidents

C-SA easterly airfield operational utility evaluation.

Preliminary investigation of effects of heavy rain on the performance of aircraft

Environmental fog/rain visual display system for aircraft simulators

The effect of very heavy rain upon aircraft and its role in wind shear attributed accidents

Aerodynamic penalties of heavy rain on a landing aircraft

Radar wind shear and severe weather penetration

RAID ENGINEERS

Effects of radar and severe weather penetration

RAID ENGINES

MT POLARIS ENGINE

MT SUPERSONIC COMBUSTION RAMJET ENGINES

Air-flare cooling returns to ramjets

The relaxation oscillation in ramjet combustion

Numerical investigation of supersonic base flow with parallel injection --- in scramjet combustors

Ideal ramjet - optimum sub infinity for fuel limit and material limit

Characteristics of a side dump gas generator ramjet

An investigation of the combustion process in solid fuel ramjets

Combustion behavior of solid fuel ramjets. Volume 1: Correlation of reacting and non-reacting flow characteristics

SUBJECT INDEX

[AD-A106661] p0136 A82-14316

Fuel-rich plasma combustion

[AD-A108136] p0258 A82-18349

Thermodynamics of organic compounds

[AD-A110430] p0318 A82-21202

Analysis of very low frequency oscillations in a ramjet combustor by use of a sensitive time lag model

Factors influencing velocity distributions at inlet/combustor interfaces

Report of the JANAF Workshop on High Frequency Instrumentation and Data Analysis Techniques

Coaxial dump ramjet combustor combustion instabilities. Part I: Parametric test data

Modeling solid-fuel ramjet combustion including radiation heat transfer to the fuel surface

The preparation and characterization of mixtures of polycyclopentadienes as solid ramjet fuels

An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacities

RAILROADS

Railway noise vs. aircraft and road traffic comparison

Report and data analysis of the effects of rain on aircraft simulators

Airborne weather radar and severe weather combination

Improved methods in ground vibration testing

A random vibration test for the evaluation of stiff sensitive component parts

A random walk

Improved methods in ground vibration testing

A random walk test for the evaluation of stiff sensitive component parts

A random walk

An investigation of random laser gyroscopes random walk experiments

Random emissions

Wide field of view laser beacon system for three dimensional aircraft range measurements

Wide field of view laser beacon system for three dimensional aircraft range measurements

Range finding

An investigation of range laser gyroscopes random walk experiments

Wide field of view laser beacon system for three dimensional aircraft range measurements

Wide field of view laser beacon system for three dimensional aircraft range measurements

Range finding

Range finding

Range finding

Range finding
A real-time simulation of helicopter IFR approaches into major terminal areas using RH6, ALS, and CDPI

A stable decentralized filtering implementation for JTIDS Real-Time --- stable community relative navigation

A real time Pegnas propulsion system model for VSTOL piloted simulation evaluation

Simulation of advanced cockpits

Real-Time Simulation Computation System for digital simulation --- of flight control systems

Piloted simulation of an on-board trajectory optimization algorithm

Color graphics based real-time telemetry processing system

A system load - Utilization of the DABs system

A Microwave Landing System simulation

Real-time digital filtering test in the 31 continuous wind tunnel at Modane

Quantitative interpretation of recirculated flow visualization by the analysis of video pictures

Advanced medium scale real-time system --- for Army helicopter tests

Real-time failure detection of aircraft engine output sensors

Advancements in real-time engine simulation technology --- of digital electronic aircraft engine controls

Air-to-air missile avoidance

Terrain following/terrain avoidance system concept development

A real-time Pegnas propulsion system model for VSTOL piloted simulation evaluation

A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation

The DFVLR Digital Flight Data Readout and Processing Station and its utility

Real Gases

Real gas flows over complex geometries at moderate angles of attack (AIAA PAPER 82-0392)

Estimation of simulation errors in the European Transonic Wind Tunnel (S7W)

Real Time Operation

Real-time, on-line digital simulation of optimum maneuvers of supersonic aircraft

Aerospace system simulation for the Northrop F/A-18L aircraft

Real-time flight management avionics software system

Recent improvements at the Naval Air Test Center for increased test system flexibility

The Advanced Range Instrumentation Aircraft improvement and modernization program

Lockheed Airborne Data System - Distributed microcomputers provide on-board real-time analyses

General purpose real-time interaction panel for digital simulation --- of flight control systems

The DFVLR Digital Flight Data Readout and Processing Station and its utility
RESEARCH INDEX

Design and implementation of a telecommunication interface for the TAAH/TVS real-time experiment [NASA-TH-682321] p0332 R82-14075

BOE systems in the flight testing of the Fokker F25 aircraft [NASA-682323] p0338 R82-14839

Research through simulation - - - simulators and research applications at Langley [NASA-FACTS-125] p0392 R82-16092

Real-time digital filtering test in the 51 continuous wind tunnel at Rome [NASA-682321] p0332 R82-22152

A piecewise linear state variable technique for real-time propulsion system simulation [NASA-682325] p0395 R82-24201

Structures testing analysis real-time network [NASA-CASE-16256] p0413 R82-25827

Evaluation of the FAA/AMPH weather data device [NASA-CASE-16266-1] p0453 R82-26294

Real-time pressure signal system for a rotary engine [NASA-CASE-16262-1] p0413 R82-25827

Advanced target acquisition and tracking concepts for real-time applications [NASA-CASE-16262] p0472 R82-27365

Tactical systems approach to interaction of 2nd echelon moving targets using real-time sensors [NASA-CASE-16262] p0472 R82-27365

Real-time estimation and prediction of ship motions using Kalman filtering techniques [NASA-CASE-16262] p0572 R82-31330

REAL VARIABLES

NT CALCULUS OF VARIATIONS
NT DIFFERENTIAL EQUATIONS
NT ELLIPTIC DIFFERENTIAL EQUATIONS
NT EXTREME VALUES
NT FALKNER-SKIN EQUATION
NT FLUID DYNAMICS
NT GEOMETRY EQUATIONS
NT KERBEL FUNCTIONS
NT LINEAR EQUATIONS
NT MEASURE AND INTEGRATION
NT NONLINEAR EQUATIONS
NT NUMERICAL INTEGRATION
NT PAGE APPERATION
NT PARTIAL DIFFERENTIAL EQUATIONS
NT QUADRATE EQUATIONS
NT BRIEG-ROTTA METHOD
NT STOHL-LIENWALD THEOREM
NT TANCENT
NT TAYLOR SERIES
NT VECTOR ANALYSIS
NT VISCOSITY
NT WEIGHTING FUNCTIONS

The application of subsonic theoretical aerodynamics to active controls - - - aircraft controls [NASA-682325] p0332 R82-21217

RESEARCHED FLOW

Experimental study of a jet deflector [NASA-682325] p0332 R82-23173

Application of a transonic similarity rule to correct the effects of sidewall boundary layer in two-dimensional transonic wind tunnels [NASA-682325] p0594 R82-32384

receivers

NT RADAR RECEIVERS
NT RADIO RECEIVERS
NT RADIOASTROPHYSICS
NT TELEVISION RECEIVERS

Design study report for General Aviation Loran-C receiver [NASA-TH-682321] p0067 R82-12062

Global positioning system timing receivers in the DSS [NASA-TH-682321] p0071 R82-20126

FAA acceptance tests on the navigation system using time global positioning system 2 set receivers [NASA-TH-682321] p0568 R82-31315

RECEIVING SYSTEMS

U RECEIVERS

RECEPTORS (CONTAINERS)

U CONTAINERS

RECIPIENT THIeMBERS

Application of the principle of reciprocity to
NT RECTANGULAR WINGS

RECTANGULAR PLATES
Response of nonlinear aircraft structural panels to high intensity noise
p0018 A82-12041
The effect of induced sound on the flow around a rectangular body in a wind tunnel
p0278 A82-26194

RECTANGULAR WINGS
On evaluating the influence of local disturbances of flow over trailing edge and leading edge flaps from the data of wind tunnel tests of a rectangular wing segment
p0015 A82-11465
Symmetric flow characteristics of thin rectangular wings
p0103 A82-16093
Investigation of the stream-strain state of a rectangular wing section of variable thickness under concentrated loads and heating
p0127 A82-18588
The effect of the cooling of the wing surface on laminar-to-turbulent boundary layer transition at supersonic flow velocities
p0128 A82-18591
The velocity potential for the baroclinically oscillating, rectangular wing with semi-infinite span in nonlinear theory
p0154 A82-19198
An experimental study of separated flow on a finite wing
[AIAA PAPER 81-1602] p0167 A82-20293
Unsteady response of rectangular wings in supersonic uniform shear flow
p0277 A82-26340
Analysis of shells of straight-wing type
p0336 A82-29841
Incompressible symmetric flow characteristics of sharp-edged rectangular wings
p0179 A82-32050
Chordwise and compressibility corrections for arbitrary planform slender wings
p0443 A82-37931
The rectangular wing with semi-infinite span in nonlinear theory
p0491 A82-39359
Experimental investigations of the separated flow around a rectangular wing --- as in a wind tunnel
[DFVLR-FB-81-12] p0025 H82-10017
Subsonic aerodynamic and flutter characteristics of several wings calculated by the S005SA P1.1 panel method
[NASA-TP-44885] p0405 H82-25216
On embedded flow characteristics of sharp edged rectangular wings (L(0--L712)
[DFVLR-FB-81-12] p0531 H82-29263

RECTIFICATION
NT GEOMETRIC RECTIFICATION (IMAGE)
RECIRCULATION FORMULAS
NR RECIRCULATION FUNCTIONS
A recursive time domain analysis of distributed line grid networks with application to the LFA/ERF problem --- Lightning Threat Analysis
p0070 A82-14761
A recursive terrain height correlation system using multiple model estimation techniques
[AIAA 82-1511] p0084 A82-38937

RECYCLING
Critical metals conservation, recycling and substitution
[AGARD-R-693] p0357 H82-22348
REDUCED GRAFFITY
The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981
[NASA-CP-82478] p0058 H82-26350

REDUCTION (CHEMISTRY)
NT HYDROGENATION
REDUCTION (METALLURGIC)
U OPTIMIZATION

REDUCTION
Redundancy management of skewed and dispersed inertial sensors
[AIAA 81-2256] p0050 A82-13503
Management of redundancy in flight control systems using optimal decision theory
p0039 H82-11084
Stage-state reliability analysis technique
p0196 H82-17104

Reconfiguration: A method to improve systems reliability
p0197 H82-17107
A redundancy concept for a digital CSAS
p0251 H82-18170
Air data measurement using distributed processing and fiber optics data transmission
p0046 H82-26214

REDUNDANCY RECODING
Design of analytical failure detection using secondary observers
[AIAA-TH-84-2204] p0059 H82-32362

REDUNDANT CABINETS
Reliability analysis of a dual-redundant engine controller
[JAE PAPER 811077] p0233 A82-24410
Generic faults and design solutions for flight-critical systems
[AIAA 82-1595] p0485 A82-36980
The Shiryaev sequential probability ratio test for redundancy management
[AIAA 82-1622] p0486 A82-36996
Redundant control unit for an advanced multipool engine
p0515 A82-40998
Description of a dual fail operational redundant strapdown inertial measurement unit for integrated avionics systems research
p0138 H82-14042
Reliability and maintainability analysis of fluidic back-up flight control system and components
[AD-110094] p0474 H82-27320

REDUNDANT STRUCTURES
NT REDUNDANT COMPONENTS
BREAST
NT HYPERSONIC BREATHER
NT V/STOL AIRCRAFT BREATHER
BREATHING
Application of adaptive estimation to target tracking
[AD-110206] p0450 H82-26272

BREATHING VEHICLES
NT AEROSPACEPLANES

REFERENCES (STANDARDS)
U STANDARDS

REFLECTING
Evaluating the effectiveness of hydrosulfurizing of the low-stability component of T-1 fuel
p0336 A82-36673

Refining and upgrading of synfuels from coal and oil shale by advanced catalytic processes
p0213 H82-17401
Fuel quality processing study, volume 1
[NASA-CR-165327-VOL-1] p0399 H82-24649
Fuel quality/processing study. Volume 2: Appendix. Task 1 literature survey
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil, part 5
[AB-117438] p0612 H82-33551

REPELLENT
Prediction and performance of radose-covered reflector antennas
p0080 A82-15311

REPELLENT RADIATION
U REFLECTED WAVES
REPELLENT RAYS
U REFLECTED WAVES
REFLECTED WAVES
Ground reflection effects in measuring propeller aircraft flyover noise
[DFVLR-FB-81-28] p0359 H82-22990

REFLECTION
NT ECH REFLECTION
NT OPTICAL REFLECTION
NT SIGNAL REFLECTION
NT WAVES REFLECTION
REFLECTION COEFFICIENT
U REFLECTANCE
REFLECTIVITY
U REFLECTANCE
REFLECTORS
NT PARABOLIC REFLECTORS
NT RADAR REFLECTORS
REFRACTED RADIATION
U REFLECTED WAVES

A-361
REMOTE SENSORS

Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft

Remote sensing of turbine engine gases [AD-A1150493]

High-altitude imagery user guide [NASA-TM-105351]

Aerodynamics and space report of the President: 1981 activities

REMOTE SENSORS

Combined multisensor displays --- image preprocessing for shape coding to reduce pilot workload

Integration of multi-sensor navigation data using optimal estimation techniques

Improvements to secondary radar for air traffic control

Magnetic anomalies as a reference for ground-speed and map-matching navigation

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays

Application of an optical data link in the airborne scanning system

The design of a viewing system for near real time stereo images from a UAV borne linescan sensor --- Unmanned aircraft

In situ ozone data for comparison with laser absorption remote sensor: 1980 PEP/KEROS program

REMOTELY PILOTED VEHICLES

HiMAT onboard flight computer system architecture and qualification [AIAA 81-2167]

Airbag impact attenuation system for the MAD-34 vehicle

Design and development of a low cost servored rate gyro for unmanned aircraft

Flight experience with a remotely operated vehicle flight test technique [AIAA PAPER 81-2417]

HiMAT aerodynamic design and flight test experience [AIAA PAPER 81-2433]

The development and flight test evaluation of an integrated propulsion control system for the HiMAT research airplane [AIAA PAPER 81-2491]

In-flight deflection measurement of the HiMAT aerodynamically tailored wing [AIAA PAPER 81-2490]

Microwave communications to remotely piloted vehicles

Sea-based remotely piloted vehicles, I - Issues and concepts


Unmanned aircraft in future combat

Horses for courses in RPV operations --- system components design and development in terms of performance and cost

Short range tactical RPV system

Canadair rotary wing technology development

U.S. Army remotely piloted vehicle program

Stabileye, B. Stephenson --- RPV performance, design and materials characteristics

The national dynamics 'observer' mini-RPV for tropical operation

SUBJECT INDEX

Mini-RPV propulsion

The application of small propellers to RPV propulsion

The control and guidance unit for MACH2

U.S. Army remotely piloted vehicle supporting technology program

A terrain following system, an algorithm and a sensor

Sensor stabilisation requirements for RPV's - a simulation study

Radars for UAVs

Electric propulsion for a mini RPV system

Flight control systems for aerial targets

The design of a viewing system for near real time stereo images from a UAV borne linescan sensor --- Unmanned aircraft

Opto-electronic push-broom scanners for navigation, reconnaissance and generation of digital data bases

The design of a RPV ground station simulator

Flight experience with a backup flight-control system for the HiMAT research vehicle [AIAA PAPER 82-1541]

A restrained model helicopter, which is able to fly, for investigations regarding brush multiparameter control behavior --- German thesis

Perspectives for the use of remotely piloted vehicles in military technology

Control of the operations of a 'flight complex' --- Russian on ground installations to aid air and space navigation

Aquila - Robot eye in the sky

Parametric study of microwave-powered high-altitude airplane platforms designed for linear flight [NASA-TP-1918]

A true air speed sensor for miniature unmanned aircraft [AIAA-82-SPACE-287]

Low cost development of INS sensors for expendable RPV and navigation [AD-1126911]

The feasibility of a high-altitude aircraft platform with consideration of technological and societal constraints [NASA-TP-04508]

The maneuverable Atmospheric Probe (MAP), a remotely piloted vehicle [AD-117624]

Alternative employment concepts for remotely piloted vehicles (RPV) FLIR/TV mission payload [AD-117627]

Mote technology for electric Remotely Piloted Vehicle (RPV) [AD-117732]

REMOVAL

Efficient part removal processes --- from molds

RECURRENT TRAJECTORIES

Piloted simulation of an on-board trajectory optimization algorithms

RENEW 95

Superalloy power engine components; controls employed to assure high quality hardware

REPAIRING

U MAINTENANCE

REPLACING

New technology for the next generation of commercial transports - Real or imaginary
BBSBUCB FACILITIES

Current aerial cameras

O.s. Bavy life support development trends

Progress in aeronautical research and technology

Applicable to civilian aircrafts

Some Italian research for developing new primary

ATC radars

The payoff from U.S. investment in aeronautical

research and development

U.S. Navy life support development trends

Current aerial cameras

V/STOL status from the engine technology viewpoint

Concept definition and aerodynamic technology

studies for single-engine V/STOL fighter/attack

aircraft

High angle-of-attack characteristics of

three-surface fighter aircraft -

camber-wing-horizontal tail configuration for

greater stability and control

Windshield system structural enhancement

APAR turbine engine controls research and
development - Present and future

You Kaman and VR2 - The first 25 years

Aerodynamic - Retrospetct and prospect /The 21st

Lancaster Memorial Lecture/

The general purpose research rotor - Design

features and considerations

The role of modern control theory in the design of

controls for aircraft turbine engines

Transition of aerospace adhesive bonding technology from HEO to operational use

Recent developments in materials and processes for

aircraft corrosion control

To the root of the problem - Some helicopter

research topics

A review of U.S. Air Force research related to

airframe and engine materials

Status of the national transonic facility

Aeronautical research and development

[NASA, 1981-95]

WASSA/General Electric broad-specification fuels combustion technology program - Phase 1 results and status

Development of engine operability

The potential impact of future fuels on small gas
turbine engines

Status report of the USAF's Engine Model

Defensive Package

& D on composite rotor blades at Hughes

The Helicopter Ride Revolution

U.S. Army remotely piloted vehicle program

Logistics research program in the United States

Air Force

Recent aerodynamic developments at DVFLAB

Aerodynamic research applications at Boeing

Aircraft B&G in Europe - A perspective view

An examination of helicopter blade profiles and tips

O.S. Bavy research and development in Europe - Perspectives

It's too logical - It'll never work /Commercial

applications of the JFZ/

Development and construction of pilot ejector

seats in Germany from 1938-1945

The influence of aeronautical B&G expenditures upon the productivity of air transportation

Aeronautical and space report of the President, 1980 activities

The Royal Aircraft Establishment: 100 years of research

Research and development at侄. Technical and scientific publications, 1981

A technical assessment of aeronautical engineering in Israel

Historical research and development inflation

indices for Army fixed and rotor winged aircraft

Present challenges of research and technology

politics

Recent progress in VSTOL technology

Description of the meteorological research radar

sytster aboard NOAA/Research Facilities Center

WP-3D aircraft

Research Facilities

RNAS - A manned aircraft flight research

facility

Applying advanced technology to flight station

design

NASA Dryden Flight Loads Research Facility

[NASA-TM-81968]

Aeronautical Research Laboratories Structures

Division

Functional requirements for the man-vehicle

systems research facility - Identifying and
correcting human errors during flight simulation

Math model description for the Visual Technology

Research Simulator (VTTS) conventional takeoff

and landing (CTOL) weapon delivery visual system

Research Management

Present challenges of research and technology

polities

Electrochemical Actuation Development Program

[AD-116126]

USAF Summer Faculty Research Program. Volume 1:

1981 research reports

USAF Summer Faculty Research Program. Volume 2:

1981 research reports

Research Projects

The F22 RAE Bedford civil flight research programme

--- on components and systems integration for

optimise ATC

Aeropropulsion research for the U.S. Army

Redesign study for an advanced flight research

research rotor

Advanced aerodynamic wing design for commercial

transports - Review of a technology program in

A-366
The analysis of the thermal-mechanical stress conditions in axial-aerodynamic rotating hot components of aircraft/gas turbines --- German thesis

Aerodynamic characteristics of a mantled bladed-disc assembly

A retirement-for-cause study of an engine turbine disk

Defects and their effect on the behavior of gas turbine discs

Rotating fluids

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor

Rotating generators

AC generators

High speed PM containment study for VSCF system --- Permanent Magnet Generator for Variable Speed Constant Frequency applications

Rotating shafts

Shafts (Machine Elements)

Turboshifts

Transonic vibration of high speed lightweight rotor due to sudden imbalance

Rotating Stalls

Rotating stall in blade rows operating in shear flow

Axial compressor stall and surge

Rotating vehicles

Rotating bodies

Rotational

Autorotation

An extension of the local momentum theory to the rotors operating in twisted flow field

Rotational flow

Fluid flow

Vortices

Rotor aerodynamics

Rotor wake characteristics relevant to rotor-stator interaction noise generation

Wake tunnel tests on airfoils in tandem cascade

Numerical treatment of helicopter rotor stability problems

Sensitivity of helicopter aeroelastic stability to dynamic inflow

The vortex flow field generated by a hovering helicopter

Helicopter rotor performance improvement by utilization of swept back parabolic blade tip

Design for the operating environment - Rotor-tail rotor program

Performance improvements with the free-tip rotor

Design optimization of rotor systems for tilt-rotor aircraft that fold for shipboard compatibility

The Circulation Control Rotor /CAB/ control system

Advancing blade flight data gathered
Will ANC technology produce the next-generation helicopter?

Periodic boundary value problem for the equations of the harmonic oscillation of a rotor blade about the axis of a flapping hinge

Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade

[IAA PAPPLIED 62-1268] p043 882-37776

General purpose research rotor

[IAA PREPRINT 81-9] p044 882-37777

Rotor state estimation for rotorcraft

[IAA PREPRINT 81-11] p042 882-37776

Substructure program for analysis of helicopter vibrations

[IAA PREPRINT 81-29] p043 882-37795

Determination of rotor wake induced expense airloads

[IAA PREPRINT 81-26] p043 882-37796

Influence of unsteady aerodynamics on hingeless rotor ground resonance

p048 882-38445

A simplified approach to the free wake analysis of a hovering rotor

p043 882-38474

Calculation of level flow among radial grazing

p048 882-38922

Flight dynamics of rotorcraft in steep high-y turns

p109 882-39117

Theoried and application of optimum airloads to rotors in hover and forward flight

p048 882-40506

Wind tunnel modeling of rotor aerodynamic loads

p049 882-40516

Predesign study for an advanced flight research rotor

p050 882-40525

A semiempirical high-speed rotor noise prediction technique

p053 882-40554

Dynamic surface measurements on a model helicopter rotor during blade slap at high angles of attack

p053 882-40555

An experimental and numerical study of 3-D rotor wakes in hovering flight

p0510 882-40946

Aeroelastic interactions between a 3/4-scale helicopter rotor and a body of revolution

p0510 882-40947

Aeroelastic equilibrium of a helicopter rotor in the presence of nonlinear aerodynamic forces

[USMIA, TP NO. 1982-23] p0507 882-42809

Experimental and analytical studies of a model helicopter rotor in hover


German-Argentine experiment: Vertical rotor wind engine

p0091 882-12668

Wind-tunnel investigation of the effects of blade tip geometry on the interaction of torsional loads and performance for an articulated helicopter rotor

[NASA-TP-19526] p0097 882-13107

An aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine

[NERA-TR-3217] p0097 882-13109

A flight investigation of blade-section aerodynamics for a helicopter main rotor having 10-64 airfoil sections

[NASA-TR-3226] p0131 882-14058

Aeroelasticity in turbomachines --- conference proceedings

[EPFL-15A-10] p0142 882-15042

Aerodynamic response of a blade in pitching oscillation with partial and full separation --- measurement of the instantaneous pressure distribution around a vibrating blade surface in a wind tunnel

p0142 882-15047

Damping for turbomachine blade variations in subsonic flow

p0162 882-15048

Self excited flow oscillation in the low pressure steam turbine cascade

p0162 882-15049

Calculation of quasi-stationary aerodynamic force acting on a cascade of oscillating airfoils in subsonic flow

p0162 882-15049
ROTOR BODY INTERACTIONS

A prescribed wake rotor inflow and flow field
prediction analysis, user's manual and technical
approach
[NASA-Cr-165804] p0566 N82-31296

ROTOR BODY INTERACTIONS
Development of a rotorcraft. Propulsion dynamics
interface analysis, volume 1
[NASA-Cr-166380] p0591 N82-32368

ROTOR DISKS
U TURBINE WHEELS
U HUBS
U SUPPORTS
U SUPPORT MOUNTS

ROTOR LIFT
A three-dimensional approach to lift and moment
coefficients of rotating blades
Investigation of a rotor system incorporating a
constant lift cap
Performance of the Rotor Systems Research Aircraft
calibrated rotor loads measurement system
Pre-design study for a modern four-bladed rotor
for the Rotor System Research Aircraft (RSRA)
--- integrating the YAH-64 main rotor
Performance of the Rotor Systems Research Aircraft
calibrated rotor loads measurement system
Pre-design study for a modern four-bladed rotor
for the Rotor System Research Aircraft (RSRA)
--- integrating the YAH-64 main rotor

ROTOR SYSTEMS RESEARCH AIRCRAFT
Rotor systems research aircraft /RSRA/ rotor force
and moment measurement system
Performance of the Rotor Systems Research Aircraft
calibrated rotor loads measurement system
Pre-design study for a modern four-bladed rotor
for the Rotor System Research Aircraft (RSRA)
--- integrating the YAH-64 main rotor

ROTOR CRAFT
A ROBTOR WING AIRCRAFT
The use of frequency methods in rotorcraft system
identification
Dynamic stability of a buoyant quad-rotor aircraft
--- for airlifting payloads externally on a silo
The emerging need for improved helicopter navigation
Preliminary design study of a hybrid airship for
flight research
Tethered rotorcrafts and their mission potential
NASA/Lewis Research Center Icing Research Program
Cooled variable nozzle radial turbine for rotor
craft applications

ROUTERS
BT BEARINGLESS ROTORS
BT CIRCULATION CONTROL ROTORS
BT COMPRESSION ROTORS
BT FAN WHEELS
BT HELICOPTER TAIL ROTORS
BT IMPELLERS
BT LIFTING ROTORS
BT RIGID ROTORS
BT Rotorcraft Wing
BT TAIL ROTORS

SUBJECT INDEX

HY TILTING ROTORS
HY TURBINE WHEELS
HY X WING ROTORS

HIGH SPEED PCC containment study for VSCF system
--- Permanent Magnet Generator for Variable Speed
Constant Frequency applications
Balancing of flexible rotors by the complex modal
method
Optimum journal bearing parameters for minimum
rotor unbalance response in synchronous whirl
Application of combined balancing methods to
flexible rotors of aviation gas-turbine engines
Preliminary design of an advanced composite rotor
hub for the UH-60A Black Hawk
Measurement of aerodynamic work during fan flutter
Stability and self-oscillations of coaxial rotors
Effect of operating life on the mechanical properties of the materials and load-bearing capacity of the rotor elements of gas-turbine engines
Experimental evaluation of squeeze film supported flexible rotors
The nonsynchronous whirls of the turbine rotor in an aerjet engine
Rotor model for the verification of computational
methods
Loading cycles and material data for the layout of a wind turbine of special hub concept
Approach to the fatigue analysis of vertical-axis wind-turbine bladed
Research on turbine rotor-motor aerodynamic interaction and rotor negative incidence stall
Basic technology of squeeze-film dampers for rotor dynamics control
Wide field of view laser beacon system for three
dimensional aircraft range measurements
Rotor fragment protection program: Statistics on aircraft gas turbine rotor failures that occurred in U.S. commercial aviation during 1978
Aerodynamic force acting on the blades of stall
regulated propeller type windmills
User's guide for the rotorcraft flight simulation
computer program C81, AGAP80 version, CDC
conversion
The Shock and Vibration Digest, volume 14, no. 3
Subsynchronous vibrations of rotor systems
Labyrinth seal effects on rotor bearing system

ROUGHESS
NT SEA ROUGHNESS
NT SURFACE ROUGHNESS
Aerodynamic penalties of heavy rain on a landing
aircraft

ROUTES
FHA/HWS aviation route forecast /ABY/ development
Maximizing South Carolina's aviation route system:
Identifying potentially profitable connector
airline routes, volume 2

SATELLITE NETWORKS

Satellite geometry considerations for low cost GPS user equipment
p0433 A82-36047

Prospects for Navsat - A future worldwide civil navigation-satellite system
p0021 A82-12630

SATellite OBSERVATION

A comparison of pole positions derived from GPS and Navy navigation satellite observations
[AD-A110765] p0499 A82-26263

Scanner imaging systems, aircraft
p0529 A82-28715

SATELLITE SOUNder

Rapid extraction of layer relative humidity, geopotential thickness, and atmospheric stability from satellite sounding radiometer data
p0282 A82-25213

SATellite SOUNder

Radiating elements for hemispherically scanned array onboard aircraft for data links to satellites
p0379 A82-32992

SATellite SOUNder

Mesoscale convective weather systems and aviation operations
[AAIA PAPER 82-0015] p0114 A82-17733

SATellite SOUNder

Satellite communications satellites

AAIA COMMUNICATIONS SATELLITES

NT GEOSTATIONARY SATELLITES

NT NAVIGATION SATELLITES

NT NAVSAT-CARIB SATELLITES

NT OSIRIS SATELLITES

NT SEASAT SATELLITES

NT TITAN SATELLITES

NT TITAN SATELLITES

NT TITAN SATELLITES

NT TITAN SATELLITES

NT TITAN SATELLITES

NT TITAN SATELLITES

TITAN SATELLITES

SCALE EFFECT

Scaling effects on leakage losses in labyrinth seals
[AAIA PAPER 82-CG-157] p0426 A82-35380

An investigation of F-16 nozzle-afterbody forces
at transonic Mach numbers with emphasis on model scale effects
[AD-A104905] p0091 A82-12392

SCALE MODELS

Analysis of data from a wind tunnel investigation of a large-scale model of a highly maneuverable supersonic V/STOL fighter - 20% configuration
[AAIA PAPER 81-2620] p0155 A82-19207

Experimental performance evaluation of 'ventilated mixers' - a new mixer concept for high bypass turbofan engines
[AAIA PAPER 82-1136] p0459 A82-37695

An experimental investigation of a bearingless model rotor in hover
p0498 A82-40512

An investigation of scale model testing of VTOL aircraft in hover
p0507 A82-40911

An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters
p0517 A82-41019

Standard tests of a research model rotor in a wind tunnel, including model similarity calculations compared with measurements
[AAIA-FAST-75-16] p0025 A82-10016

Scale-model studies on the improvement of flow patterns of a low-speed tunnel
[AAIA-CR-169413] p0209 A82-17228

Rotor model for the verification of computational methods
[120-275] p0214 A82-17638

SPIN TUNNEL INVESTIGATION OF A 1/13-SCALE MODEL OF THE NASA AD-1 OBLIQUE-WING RESEARCH AIRCRAFT

[NASA-TR-83236] p0252 A82-18183

Aeroparticle survey of wind tunnel testing of small and large scale rotors
[SNAS-821-210-107] p0350 A82-22225

Design of dynamically-scaled, asymmetrical wind tunnel models
[NASA-78/18] p0356 A82-22253

Research model wing/tail fabrication - transonic wind tunnel 1/7.5-scale model
[AD-A114101] p0274 A82-28288

Investigation of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Textron Model 222
[SAC-NASA-166562] p0535 A82-29315

Aicoustic similarity laws for centrifugal fans
[ESA-TT-712] p0603 A82-33172

SCALeS LAWS

State helicopter rotor low frequency broadband noise
p0273 A82-25772

Prediction of flyover jet noise spectra from static tests
p0359 A82-22963

SCANNERs

NT MULTISPECTRAL BAND SCANNERS

NT OPTICAL SCANNERS

Current pressure measuring system in the transonic wind tunnel
[AD-A106272] p0192 A82-16096

SCANNING

NT RADAR SCANNING

SCANNING DEVICES

NT SCANNERS

SCAR PROGRAM

NT SUPERSONIC CRUISE AIRCRAFT RESEARCH

SCATTER PROPAGATION

NT IONOSPHERIC F-SCATTER PROPAGATION

SCATTERING

NT ACOUSTIC SCATTERING

NT ATMOSPHERIC SCATTERING

NT BACKSCATTERING

NT CONFIGURATION INTERACTION

NT IONOSPHERIC F-SCATTER PROPAGATION

NT MICROWAVE SCATTERING

NT RADAR SCATTERING

NT REFRACTION

NT WAVE SCATTERING

SCATTERING COEFFICIENTS

Commercial airborne weather radar technology
p0075 A82-14666

SCATTERSTORM

Development and test of a tactical visibility sensor
p0579 A82-45920

SCENE ANALYSIS

Terrain model animation
[AD-A107911] p0215 A82-17887

SCHEDuLING

NT PREDICTION ANALYSIS TECHNIQUES

Dynamic scheduling of runway operations
p0445 A82-26200

Airfield and airspace capacity/delay policy analysis
[AD-A110777] p0458 A82-26266

SCHELLEN PHOTOGRAPHY

Operational flow visualization techniques in the Langley Unitary Plan Wind Tunnel
p0597 A82-32671

Shadowgraph techniques in transonic tests with powered nacelles
p0597 A82-32674

SCHENN-CRISTOFFEL TRANSFORMATION

A Schwarz-Cristoffel method for generating internal flow grids
p0328 A82-29005

SCINTILLATION COUNTERS

Linear alpha-ray altimeter
p0210 A82-23225

SCINTILLATORS

NT SCINTILLATION COUNTERS

SCINTILLOMETERS

NT SCINTILLATION COUNTERS

SCORING

Electro-optical vector scoring system -- for missile aims distance in fleet training exercises
[AAIA PAPER 81-2373] p0600 A82-13945

SCOUT HELICOPTER

NT P-531 HELICOPTER

SCRAMJET ENGINES

NT SUPERSONIC COMBUSTION RAMJET ENGINES

A-379
SCRAMJETS

SCRAMJETS US SUBLUNSONIC COMBUSTION RAMJET ENGINES
SCREEN EFFECT
The effect of a screen on the aerodynamic characteristics of an oscillating profile
[AD-103065] p0583 AB-2-46593

SCRAMJETS US SCORING
SCRAMJETS US SCREEBURES
Predictive model for jet engine test cell opacity
[AD-117150] p0610 AB-2-33397

SF-21 AIRCRAFT
Ground movement control and guidance - Cat. 3 operations experience in Air Inter
[AD-114664] p0167 AB-2-20222

SEA KING HELICOPTER
U S P-3 HELICOPTER
SEA KNIGHT HELICOPTER
U CH-66 HELICOPTER
SEA ROUGHNESS
Real time estimation and prediction of ship motions using Kalman filtering techniques

SEA STATES
A comparison of Seasat-derived wave height with surface data
[AD-A 114878] p0584 AB-2-47496

SEA WATER
Rescue at sea
[NASA-CASE-LAB-1280 I-I] p0308 AB-2-20154

SEABOARDS
SEA BOARDS
SEA LEGS
SEA GLIDER
SEA LIGHTS
SEA MOSQUITOS
SEA PATROLES
SEA SEARCHES
SEA SATELLITES
A comparison of Seasat-derived wave height with surface data
[AD-A114878] p0584 AB-2-47496

SEAT BELTS
Evaluation of a proposed modified F/PB-111 crew seat and restraint system
[AD-1101688] p0313 AB-2-21167
Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents
[AD-1140870] p0531 AB-2-29275

SEATS
NT EJECTION SEATS
NT FLIGHT EJECTION SEATS
Design of a crashworthy crew seat for the Boeing Vertol Chinook helicopter
[AD-A1146975] p0049 AB-2-29275

SEATING
Crashworthiness military passenger seat development
[AD-A1146976] p0049 AB-2-29275

SEATING
Test methodology for evaluation of firefighter aircraft seat cushions
[AD-A1146977] p0049 AB-2-29275

SEATING
Army helicopter crew seat vibration - Past performance, future requirements

SEATING
Standardization of aircraft and helicopter seats
[AD-A1101686] p0313 AB-2-21167

SEATING
Crashworthiness studies: Cabin, seat, restraint, and injury findings in selected general aviation accidents
[AD-1140870] p0531 AB-2-29275

SEATING
Assessment of burning characteristics of aircraft interior materials

SEATING
Results from tests of three prototype general aviation seats

SECONDARY BATTERIES
U STORAGE BATTERIES
SECONDARY FLOW
Experimantal study of the effects of secondary air on the emissions and stability of a lean premixed combustor
[AD-A1146978] p0415 AB-2-34992

SECONDARY FLOW
Secondary flows and losses in axial flow turbines
[ASME-PAPR 82-6T-19] p0420 AB-2-35288

SECONDARY FLOW
Secondary flow mixing losses in a centrifugal impeller
[ASME-PAPR 82-6T-48] p0421 AB-2-35302

SECONDARY FLOW
Secondary flow effects and mixing of the wake behind a turbine stator
[ASME-PAPR 82-6T-46] p0422 AB-2-35304

SECONDARY RESISTANCE
End-wall boundary layer calculation methods
[AD-A1146979] p0204 AB-2-17188
at transonic and supersonic speeds

An asymptotic theory of separated flow past low-aspect-ratio wings

Experimental investigations of the separated flow around a rectangular wing --- in a wind tunnel

Low Reynolds number airfoil survey, volume 1

A method of predicting fuselage loads in hover

On the calculation of separated flow on helicopter fuselages

Some remarks on buffetting --- of wings, wind tunnel models

Water tunnel flow visualization and wind tunnel data analysis of the F/A-18 --- leading edge extension vortex effects

The aerodynamics of windblast

Program presentation of the working group separated flow: Problems with rotary wings

Flows over wings with leading-edge vortex separation

User's manual for interfacing a leading edge, vortex rollup program with two linear panel methods

Development of the Sea King composite main rotor

New separators for battery systems

Small engine inlet air particle separator technology

The Sharpev sequential probability ratio test for redundancy management

Programmable controller system for wind tunnel divergence vanes

A mixed-flow cascade passage design procedure based on a power series expansion

Design considerations for duty cycle, life and reliability of small limited life engines

Unsolved problems of nickel cadmium batteries

Operational evaluation of the new generation of jet transport aircraft

Optimization of requirements on the pitting-prevention properties of turbojet-engine blades

A method for predicting the lifetime of gas turbine blades

Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

Boeing's big, quiet 737-300

A method of determining safe service life for helicopter components

Hughes helicopters - Fatigue life methodology

Introduction to the principles of fracture mechanics

Evaluation of crack growth rates for service life tracking

Problems and options in advanced composite repair

Mechanical and metallurgical considerations in extending the life of turbine blades

A procedure for evaluating fuel composition effects on combustor life

Determinations 81-H-84/Spectra and their application for keeping the operational life of the fuel system in tank, tanker, and other aircraft

The role of the scale parameter in service load assessment and simulation --- of aircraft flight loads

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components

A method for determination of the aeroelastic behavior of aircraft with active control systems

A method for predicting the life of the aeroelastic behavior of aircraft with active control systems

A method for prediction of the lifetime of gas turbine blades

Effects of ultra-clean and centrifugal filtration on rolling-element bearing life

Boeing's big, quiet 737-300

A method of determining safe service life for helicopter components

Hughes helicopters - Fatigue life methodology

A-382
Measurements of a three-dimensional boundary layer
Investigation of the aerodynamic-contour method
Analysis methods for predicting structural
An exploratory research and development program
United States Air Force shale oil to fuels, phase 2
Jet fuel locks to shale oil: The 1980 technology
CFC drive shaft and GFC coupling for the tail
An exploratory research and development program
An exploratory research and development program
Evaluation of hydrocracking catalysts for
development of accelerated fuel-engines
Jet fuel from shale oil: The 1981 technology review
Befining and upgrading of synfuels from coal and
definition of counter-rotating intershaft support
forces generated in a squeeze-film damper
development of cascades flutter in
three-dimensional analysis of cascade flutter in
production of specification of JP-4 fuel from
leading to specifications for aviation turbine
Preliminary process analyses
tests of CFHP spar/rib models with corrugated web
Shear Stress
Compatibility of 350 deg curing honeycomb
adhesives with phosphoric acid anodizing
Tests of CFHP spar/rib models with corrugated web
Shear Stress
Crack growth evaluation of a method to convert
crosswise-reinforced cylindrical shells
United States Air Force shale oil to fuels, phase 2
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
United States Air Force shale oil to fuels, phase 2
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
Bal-Bartoe Jetwing flight tests p0075 A82-14928
An investigation of the use of a propulsion wing-canard concept for improved maneuvering [HALA-PAPER-81-2622] p0017 A82-16905
Thrust-induced effects on low-speed aerodynamics of fighter aircraft [HALA-PAPER-81-2612] p0155 A82-19203
Tactical STOL moment balance through innovative configuration technology [HALA-PAPER-81-2616] p0155 A82-19204
Application of thrust vectoring for STOL [HALA-PAPER-81-2614] p0155 A82-19205
STOL capability impact on advanced tactical aircraft design [HALA-PAPER-81-2617] p0155 A82-19206
Quiet Short-Haul Research Aircraft - The first 3 years of flight research [HALA-PAPER-81-2625] p0156 A82-19209
Sea based support aircraft alternatives [HALA-PAPER-81-2645] p0157 A82-19217
Design features of a sea-based multipurpose V/STOL, STOL and aircraft in a support role for the U.S. Navy [HALA-PAPER-81-2650] p0157 A82-19218
Performance flight test evaluation of the Bal-Bartoe JW-1 Jetwing STOL research aircraft [HALA-PAPER-81-2640] p0178 A82-20762
Analytical control law for desirable aircraft lateral bandwidth qualities p0163 A82-21941
US Navy begins slow shuffle towards V/STOL p0296 A82-20311
STOL aircraft response to turbulence generated by a tall upward building p0233 A82-35521
Advanced exhaust nozzle concepts using spanwise blowing for aerodynamic lift enhancement [HALA-PAPER-81-1152] p0430 A82-37692
Thrust reverser induced flow interference on tactical aircraft stability and control [HALA-PAPER-81-1152] p0430 A82-37693
Application of advanced exhaust nozzle for tactical aircraft p0505 A82-40889
Design and experimental verification of the USF-flap structure for HAL STOL aircraft --- Upper Surface Blowing [HALA-PAPER-81-1152] p0508 A82-40917
Development of the Circulation Control Wing-Upperc Surface Blowing powered-lift system for STOL aircraft p0512 A82-40969
Test results of chordwise and spanwise blowing for low-speed lift augmentation p0515 A82-40999
Design of a longitudinal ride-control system by Zikan's method of inequalities p0516 A82-41114
Quiet short-haul research aircraft familiarization document, revision 1 [HALA-PAPER-81-2828] p0026 A82-10031
Development and evaluation of automatic landing control laws for light wing loading STOL aircraft [HALA-PAPER-81-16610] p0028 A82-10043
Integration of advanced exhaust nozzle p0094 A82-13075
Airbus landing on an elevated STOLport [HALA-PAPER-81-3833] p0135 A82-14010
Surveys of flow-field around empennage of the HAL STOL-research-aircraft model [HALA-PAPER-81-7677] p0198 A82-17120
A velocity vector measuring system with 13 asymmetric wedge type yawmeters --- measuring flow distribution around the empennage of STOL models [HALA-PAPER-81-6749] p0213 A82-17274
Review of defense-related vertical and short takeoff and landing (V/STOL) aircraft programs [GFO-55-278] p0254 A82-18205
IFV-124 diagnostic and development program [AD-A103412-1] p0258 A82-18206
NASA/MAA Advanced Rotorcraft Technology and Tilt Rotor Workshops. Volume 1: Executive Summary [HALA-PAPER-81-8430] p0262 A82-19170
A short takeoff performance computer program [AD-AI098417] p0308 A82-20179
Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft [HALA-PAPER-81-2911] p0305 A82-20187
STOL aircraft structural vibration prediction from acoustic excitation p0345 A82-22169
Flight experiments using the front-side control technique during piloted approach and landing in a powered lift STOL aircraft [HALA-PAPER-81-6657] p0456 A82-26310
High pressure bleed for STOL and STOL-IL performance: A conceptual examination [AD-A115762] p0590 A82-32357
Analysis of several gliderpath and speed control autopilot concepts for a powered lift STOL aircraft [HALA-PAPER-81-6652] p0611 A82-33400
SHORT WAVE RADIATION BY MILLIMETER WAVES
SHENFLER
Strength degradation of impact damaged structure p0203 A82-17169
SHROUDED BODIES
U SHRODS
SHROUDED BODIES
The subsonic performance of practical military variable area convergent nozzles p0094 A82-13076
SHROUDED TURBINES
Investigation of vibration of shrouded turbine blades [ASBE-PAPER-81-DELT-129] p0162 A82-19343
A practical approach to systems mode analysis --- for Disc-blade-shroud assemblies [ASBE-PAPER-81-DELT-1130] p0162 A82-19344
SHRODS
Effect of impeller extended shrouds on centrifugal compressor performance as a function of specific speed [ASBE-PAPER-82-GT-226] p0428 A82-35411
Active clearance control system for a turbine machine [ASBE-CSAE-LBN-12530-1] p0591 A82-32366
SHUDDS
U BYPASSES
U CIRCITS
U SHUTTLE ORBITERS
U SPACE SHUTTLE ORBITERS
IFIC (COEFFICIENTS)
U STRUCTURAL INFLUENCE COEFFICIENTS
SIDE-LOOKING RADAR
U RADAR STRATEGIES
Analysis of side-looking airborne radar /SLAR/ performance in the detection of search and rescue targets p0293 A82-27641
Utilization of AH/APS-94 side-looking airborne radar systems in search and rescue [AD-A114886] p0561 A82-30437
SIDELOOK REDUCTION
Secondary radar problems - The presence of false echoes p0242 A82-25323
SIDELIPS
A cost effective method for the control of roll due to side slip on a low speed aircraft [HALA-PAPER-81-2822] p0054 A82-13861
Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the suction analogy [HALA-PAPER-81-1385] p0489 A82-39141
Lateral aerodynamics of delta wings with leading edge separation A-305
Flight-determined correction terms for angle of attack and sideslip

[IEEE 1975] p0071 A82-14776

Radar hostile fire location

[IEEE 1975] p0075 A82-14857

F-15 SAR

[IEEE 1975] p0077 A82-14938

Sanctuary radar --- with digital processor for Doppler filtering and pulse compression

[IEEE 1975] p0150 A82-1890x

Microwave systems for radar guided missiles

[IEEE 1975] p0150 A82-18936

Comparison of various elevation angle estimation techniques

[IEEE 1975] p0175 A82-20569

Simulator data test instrumentation - Flight test challenge of the eighties

[IEEE 1975] p0178 A82-20768

Integration of multi-sensor navigation data using optimal estimation techniques

[IEEE 1975] p0273 A82-25577

Distributed airborne array concepts

[IEEE 1975] p0342 A82-31669

Doppler processing, waveform design and performance measures for some pulsed Doppler and ATD-radar. II

[IEEE 1975] p0390 A82-34671

A recursive terrain height correlation system using multiple model estimation techniques

[IEEE 1975] p0404 A82-38937

Parameter estimation applied to general aviation aircraft - a case study

[IEEE 1975] p0487 A82-39094

Positive airborne location

[IEEE 1975] p0597 A82-42791

Aircraft position measurement using laser beacon optics

[IEEE 1975] p0109 A82-16067

A design for a 32-channel multiplexer --- for unmanned aircraft navigation sensors

[IEEE 1975] p0259 A82-18503

Le Recherche Aerospatiale, bi-monthly Bulletin number 1981-5, September - October 1981 --- aerospace B and D methodology and instrumentation

[IEEE 1975] p0343 A82-22145

Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry

[IEEE 1975] p0412 A82-25506

Investigation of air transportation technology at Ohio University, 1981 --- local

[IEEE 1975] p0445 A82-26204

Boring target detector (Vol 2)

[IEEE 1975] p0539 A82-29520

Fiber optics remote of terminal radar and beacon signals

[IEEE 1975] p0574 A82-32140

Reliability and maintainability improvement program for the AV-8B/AV-8A Harrier head-up display set, development of the signal data converter, CV-3600/AVQ-30(V), volume 3

[IEEE 1975] p0591 A82-33265

Modeling of a tracking radar in terms of a nonlinear second order phase lock loop

[IEEE 1975] p0596 A82-35280

Radar detection

[IEEE 1975] p0303 A82-1386

Updated station deselection procedures to support automatic Omega receiver operation

[IEEE 1975] p0307 A82-14712

Terrain reflection effects on data reception from airborne vehicles

[IEEE 1975] p0291 A82-27231

Simulation of correlation-extremal receivers of signals from sampling-phase radio-navigation systems

[IEEE 1975] p0492 A82-39404

Signal reflection

[IEEE 1975] p0303 A82-20166

L-band DME multipath environment in the microwave landing system (MLSS) approach and landing region

[IEEE 1975] p0586 A82-32330

Signal to noise ratios

[IEEE 1975] p0012 A82-11020

Digital signal processing on a background of reflections for the international aircraft landing system

[IEEE 1975] p0053 A82-13703

A-386
SUBJECT INDEX

Distributed airborne array concepts p0304 A82-31669
Median PRF performance analysis --- Pulse-Repetition Frequency p0436 A82-37378
Recent results in main beam nulling --- aircraft antenna design p0553 A82-43792
Investigation of air transportation technology at Ohio University, 1981 --- lorawan p0445 A82-26204

SIGNAL TRANSMISSION

SI SIGNAL TRANSMISSION NT DATA TRANSMISSION NT IONOSPHERIC P-SOCKET PROPAGATION NT IONOSPHERIC PROPAGATION NT MICROWAVE TRANSMISSION NT MULTIPLEX TRANSMISSION NT MULTIPLE ACCESS NT P-CR TELEMETRY NT RADAR TRANSMISSION NT RADIO TELEMETRY NT RADIO TRANSMISSION NT SATELLITE TRANSMISSION NT TELEMETRY NT TRANSFORMER'S RADIO PROPAGATION Microwaves communications to remotely piloted vehicles p0150 A82-18911

Lead navigation with a low cost GPS receiver p0175 A82-20656
Fiber optics remotes of terminal radar and beacons signals [AD-A116403] p0574 A82-32140
SIGNATURE ANALYSIS NT ADS plume flow properties for infrared analysis --- Augmented Deflecting Exhaust Nozzle [AER-82-17606] p0114 A82-17606
On-rate vibration measurement, dynamic tracking and balancing p0172 A82-20945
The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel [82-263] p0267 A82-19231

SIGNALS

NT AERIAL SIGNATURES NT RADAR SIGNATURES NT SPECTRAL SIGNATURES NT SIKORSKY AIRCRAFT NT SH-3 HELICOPTER NT US-60A HELICOPTER Light Airborne Multi-Purpose System p0046 A82-12294

Sikorsky ACAP preliminary design --- Advanced Composite Airframe Program p0500 A82-40526

SIKORSKY HSS-2 HELICOPTER 0 SH-3 HELICOPTER SILICA 0 SILICON DIECIDE SILICON Silicons liquid crystal light valve for flight simulation applications [AD-A110528] p0413 A82-26005
Silicon Carbides Brittle materials design, high temperature gas turbine. [AD-A106670] p0191 A82-16085
Silicon Compounds NT SILICON CARBIDES NT SILICON DIECIDE NT SILICON NITRIDED NT SILICON OXIDES NT SILICON POLYMERS NT SILICONE SILICONES US Naval fleet aircraft corrosion p0211 A82-17350
SILTS 0 SEDIMENTS

SIMILARITIES

S ANALOGIES SIMILARITY THEOREM

Similarity parameters for the geometry of structures of a supersonic jet propagating in a channel and in a subsonic space p0387 A82-34132
Standard tests of a research model rotor in a wind tunnel, including model similarity --- calculations compared with measurements [BEG-PRM-79-16] p0255 A82-10016
Acoustic similarity laws for centrifugal fans [EAA-IT-712] p0603 A82-33172

SIMULATION

NT ACOUSTIC SIMULATION NT ANALOG SIMULATION NT COMPUTER SIMULATION NT COMPUTERIZED SIMULATION NT CONTROL SIMULATION NT DIGITAL SIMULATION NT ENVIRONMENT SIMULATION NT EXHAUST FLOW SIMULATION NT FIGHT SIMULATION NT LEADING SIMULATION NT SPACE ENVIRONMENT SIMULATION NT SYSTEMS SIMULATION NT THERMAL SIMULATION Wind tunnel tests of powered models: a comparison of two methods of simulating the jet of jet engines p0095 A82-13087
A piecewise linear state variable technique for real time propulsion system simulation [NASA-TM-B295] p0395 A82-24201
Evaluation of a voice recognition system for the AH-64A AH-41 rotor station function [NASA-TR-84-487] p0405 A82-25235
Laboratory-scale simulation of underground coal gasification: Experiment and theory [DES-001063] p0525 A82-20470
A simulation language approach to structural interaction problems p016a A82-33758

SIMULATOR TRAINING NT TRAINING SIMULATORS NT SIMULATORS NT COCOPIT SIMULATORS NT CONTROL SIMULATION NT ENVIRONMENT SIMULATORS NT FLIGHT SIMULATORS NT NOCITION SIMULATORS NT TARGET SIMULATORS NT TRAINING SIMULATORS NT VERTICAL MOTION SIMULATORS Performance calibration results for a Compact Multimission Aircraft Propulsion Simulator [AIAA PAPER 82-0254] p0116 A82-17866
Research through simulation --- simulators and research applications at Langley [NASA-FATC-152] p0192 A82-16092
Development of the automated AFAPL engine simulator test for lubricant evaluation [AD-A106128] p0192 A82-16093
Maintenance training simulator design and operation: Handbook of ISB procedures for design and documentation [AD-A119410] p0457 A82-26521

SINGULARITY (MATHEMATICS)

Singularity embedding method in potential flow calculations [NASA-NC-164387] p0566 A82-31000

SIGDI HELICOPTER 0 OH-13 HELICOPTER SIMULATION

Selectivity Survey and design of airfields --- Russian book p0552 A82-43603
Considerations for optimum siting of WEMAD to detect convective phenomena hazardous to terminal air navigation, part 1 --- meteorological radar [007/PA/AD-82-56] p0586 A82-32329
Size reduction flight test airborne data systems p0178 A82-20766
Size determination minimum mass sizing of a large low-aspect ratio airframe for flutter-free performance [AIAA PAPER 80-0724] p0225 A82-24022
SKIDDING

Skin waviness during antiskid braking and cornering on a dry runway [NASA-TP-2009]

SKID STRESSES

Design of the composite spar-wingSkin joint

Fracture control in ballistic-damaged graphite/epoxy wing structure

Design considerations and experiences in the use of composite material for an aerelastic research wing

Heat destructive detection of exfoliation corrosion around fastener holes in aluminum wing skins

Unstructured — a new concept for lightweight, integrally stiffened skin structure

Non-honeycomb F-16 horizontal stabilizer structural design

Prediction of fatigue crack propagation in plane specimens and thin-walled structural elements of aircraft wing skin under programmed loading

Design considerations and experiences in the use of composite material for an aerelastic research wing

Structural analysis computer programs for rigid bodies

Design and implementation of efficient algorithms for arbitrary planform slender wings

Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the suction analogy

Sensitivity analysis and optimization of aerelastic stability

Linear and nonlinear force and pitching moment characteristics of slender wings on a sharp cone at Mach 3

S N D T

SLIPSTBABS

NT AVHFRUONIC DRAG

NT FRICTION DRAG

NT VISCUOS DRAG

Complete velocity profile and 'optimal' skin friction formulas for the plane wall-jet

Skin friction lines

Measurement and visualization of skin friction on the leeside of delta wings in supersonic flow

Laminar airfoils for transport aircraft

Correlation of Preston-tube data with laminar skin friction (Log No. J12984)

SKIRTS

The net-skirt to a parachute canopy as a device to prevent inversion

SKY BRIGHTNESS

Altimeter measurements of European sky and terrain radiances

SKY WAVES

NT WHISTLERS

SLABS

Structural analysis computer programs for rapid multicomponent pavement structures with discontinuities, WEPLIQED and WELSPRAYE. Report 1: Geometric development and numerical presentations

SLAB

U SUPERSONIC LOW ALTITUDE MISSILE

SLAFT

U SLOPES

SLANT PERCEPTION

U SPACE PERCEPTION

SLI-BS

Test site instrumentation study. Volume 2: Crash and impact investigation
SOLID STATE LASERS

- NT MRS
- NT LIGHT EMITTING DIODES
- NT PHOTOVOLTAIC CELLS
- NT SEMICONDUCTOR DEVICES
- NT THERMISTORS
- NT TAG LASERS

Solid-state VSBAC with remote maintenance and monitoring

p0122 A82-16144

L-band power generation in the General Electric solid-state radar

p0150 A82-16914

A system design for a multispectral sensor using two-dimensional solid-state imaging technology

p0377 A82-31991

SOLID STATE LASERS

- NT TAG LASERS

SOLID-SOLID INTERFACES

Diffusion bonding in superplastic forming/diffusion bonding

p0222 A82-23754

An experimental investigation of interfacial temperatures in blade-root material rubbing of aircraft compressors

p0213 A82-17401

SOLIDIFICATION

Development of in-can melting process and equipment, 1979 and 1980

[DE82-001050] p0195 A82-16634

SOLUTIONS

- NT AQUEOUS SOLUTIONS

SOLVENT REFINED COAL

Defining and upgrading of synfuels from coal and oil shales by advanced catalytic processes

[DE82-001127] p0213 A82-17401

Performance of SBC II fuels in gas-turbine combustors. Alternative-fuels-utilization program

[DE82-001050] p0195 A82-16634

SOLVENTS

Determination of selected distillate blending solvents in simplex and complex aircraft fuel services using glass capillary gas chromatography

[AD-A105568] p0135 A82-14312

SOUND

- NT SOHOBOYS

SOUND BOOMS

Assessment of community response to high-energy impulsive sounds

[AD-A110110] p0322 A82-21777

SONIC FLOW

U TRANSONIC FLOW

SONIC NOISES

Screech suppression in supersonic jets

[AIAP PAPER 02-0505] p0114 A82-17753

Heat transfer from nozzles under the conditions of flow laminarization

p0583 A82-46631

SONIC SPEED

U ACOUSTIC VELOCITY

SOHOBOYS

Aerodynamic characteristics of nohoour parachute decelerators limited to a length of three feet

[AIAP PAPER 01-1950] p0007 A82-10425

SOOT

The smooting tendency of fuels containing polycyclic aromatics in a research combustor

[AIAP PAPER 02-0259] p0164 A82-19791

Evaluation of fuel injection configurations to control carbon and soot formation in small GT combustors

[AIAP PAPER 02-1175] p0417 A82-35041

Chemistry of combustion of fuel-water mixtures

[AD-A105401] p0090 A82-12178

Investigation of soot and carbon formation in small gas turbine combustors

[NASA-CA-167853] p0354 A82-22267

Predictive model for jet engine test cell opacity

[AD-A117505] p0610 A82-33937

SOUND

U ACOUSTICS

SOUND ABSORPTION

U SOUND TRANSMISSION

SOUND BARRIER

U ACOUSTIC VELOCITY

SOUND Fields

An iterative finite element-integral technique for predicting sound radiation from turbines anlets in steady flight

[AIAP PAPER 02-0124] p0115 A82-17796

Fluctuating forces and rotor noise due to distorted inflow

p0510 A82-40945

SOUND GENERATORS

Experiments on propeller noise

p0359 A82-22978

SOUND LOCALIZATION

Study of the source function by the causality methods defined by Libaer and Siddon

[PB82-205170] p0615 A82-34196

SOUND MEASUREMENTS

U ACOUSTIC MEASUREMENTS

SOUND PRESSURE

Propeller tip vortex – a possible contributor to aircraft cabin noise

p0113 A82-17603

Pressure dependence of jet noise and mleiscaling of blow-offs

p0167 A82-20266

Model helicopter rotor low frequency broadband noise

p0273 A82-25772

Evaluation of the acoustic measurement capability of the NASA Langley F-2101 wind tunnel test section with acoustically absorbent ceiling and floor treatments

[NASA-4165796] p0030 A82-10059

Acoustic measurements of F-15 aircraft operating in hush house, NASA 4920-02-070-2721

[AD-A109828] p0310 A82-21042

Acoustic measurements of F-16 aircraft operating in hush house, NASA 4920-02-070-2721

[AD-A110593] p0310 A82-21043

USAF bioenvironmental noise data handbook. Volume 156: F-106A aircraft, near and far-field noise

p0602 A82-33168

SOUND PROPAGATION

Impedance modeling of acoustic absorbing materials for aircraft engine applications

p0062 A82-14043

Scattering of sound by a vortex ring

p0104 A82-16148

Ultrasonic method for flow field measurement in wind tunnel tests

p0178 A82-26765

High frequency sound emission from moving point multiple sources embedded in arbitrary transversely sheared mean flows

p0277 A82-26318

SOUND TRANSDUCERS

- NT MICROPHONES

SOUND TRANSMISSION

- NT NOISE CONTROL MEASURES

Noise control measures in the new Singapore International Airport

p0107 A82-16786

Development of a transmission loss test facility for light aircraft structures

p0128 A82-18728

Experimental modal analysis of the fuselage panels of an Aero Commander aircraft

[NASA-CA-165750] p0026 A82-10028

Preliminary thoughts on helicopter cabin noise prediction methods

p0248 A82-18148

Acoustic measurements of F-15 aircraft operating in hush house, NASA 4920-02-070-2721

[AD-A109828] p0310 A82-21042

Analytical prediction of the interior noise for light aircraft structures

p0178 A82-26765

Evaluation of the acoustic measurement capability of the NASA Langley F-2101 wind tunnel test section with acoustically absorbent ceiling and floor treatments

[NASA-4165796] p0030 A82-10059

Acoustic measurements of F-15 aircraft operating in hush house, NASA 4920-02-070-2721

[AD-A109828] p0310 A82-21042

Acoustic measurements of F-16 aircraft operating in hush house, NASA 4920-02-070-2721

[AD-A110593] p0310 A82-21043

USAF bioenvironmental noise data handbook. Volume 156: F-106A aircraft, near and far-field noise

p0602 A82-33168

SOUND VELOCITY

U ACOUSTIC VELOCITY

SOUND WAVES

- NT ACOUSTIC VELOCITY

- NT ENGINE NOISE

- NT JET AIRCRAFT NOISE

A-390
Space Programs
Aeronautics and space report of the President: 1991 activities
[NASA-TP-84-6719] p0603 882-33332

Space Sciences
NASA aerospace sciences

Space Shuttle Orbital Flights
U.S. space transportation system flights

Space Shuttle Orbital Flights
U.S. space transportation system flights

Space Perceptions
The residual-measure criterion for model reduction in the analysis of the NASA Space Shuttle's digital flight control system
[AlAA Paper 82-0369] p0120 882-17909

Numerical simulation of Space Shuttle Orbiter flow field
[AlAA Paper 82-0026] p0266 882-27083

Approximate method of predicting heating on the windward side of Space Shuttle Orbiter and comparisons with flight data
[AlAA Paper 82-0023] p0373 882-31853

NASA Dryden's experience in parameter estimation and its use in flight test
[AlAA Paper 82-1171] p0469 882-39115

Force and moment, flow-visualization, and boundary-layer tests on a shuttle orbiter model at Mach 6
[AlAA-TfP-1952] p0097 882-13106

Analysis of a longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle
[AlAA-TtP-81366] p0100 882-13149

Comparison of analytical predictions of longitudinal short period pilot-induced oscillations with results from a simulation study of the space shuttle orbiter
[AlAA-TfP-03267] p0368 882-23236

Wind-Tunnel/Flight Correlation, 1981
[ASA-CA-82-2225] p0403 882-25196

Space Shuttle Payloads
Research and development at NASA. Technical and scientific publications, 1981
p0360 882-23137.
SUBJECT INDEX

SPECTRAL ANALYSIS
- MT ABSORPTION SPECTRA
- MT EMISSION SPECTRA
- MT NOISE SPECTRA
- MT SPECTRAL BANDS
- MT VIBRATIONAL SPECTRA
- MT VISIBLE SPECTRUM

SPECTRAL ABSORPTION
- U ABSORPTION SPECTRA
- U SPECTRAL ANALYSIS
- U SPECTRAL ANALYSIS

SPECTRAL BANDS
- MT ABSORPTION SPECTRA
  Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques
  [NASA-CR-165667]
  p0350 H82-22949

SPECTRAL DESIGN
- The sixteenth to forty micron spectroscopy from the NASA Lunar Jet
  [NASA-CR-166664]
  p0310 H82-21056

SPECTRAL SENSITIVITY
- High-sensitivity holographic plates PI-3J
  p0519 H82-14575

SPECTRAL SIGNATURES
- Collection and simulation of spatial infrared signatures of military jet aircraft
  [AIAA PAPER 81-2494]
  p0050 H82-13921

SPECTROMETERS
- MT GAMMA RAY SPECTROMETERS
- MT INFRARED SPECTROMETERS
- MT LASER SPECTROMETERS
- Evaluation of plasma source spectrometers for the Air Force Oil Analysis Program
  [NASA-DR-13309]
  p0475 H82-27512

SPECTROMETER
- U SPECTROMETERS
- U SPECTROMETERS

SPECTROPOLARIMETERS
- U POLARIZERS

SPECTROSCOPES
- U SPECTROSCOPES

SPECTROSCOPIC ANALYSIS
- The use of Doppler spectroscopy to study the characteristics of the polynuclear aromatic hydrocarbons in petroleum products
  [NASA-CR-702453]
  p0186 H82-22198
- Determination and analysis of jet and missile fuel deposits
  [AD-101585]
  p0090 H82-12240

SPECTROSCOPIC
- MT ASTRONOMICAL SPECTROSCOPY
- MT MASS SPECTROSCOPY
- MT SPECTROSCOPIC ANALYSIS
- MT X RAY SPECTROSCOPY

SPECTRUM ANALYSIS
- Digital spectral analysis of the noise from short duration impulsively started jets
  p0430 H82-36191
- Maximum-entropy spectral analysis of radar clutter
  p0586 H82-47407
- The lateral response of an airship to turbulence
  [AD-1115197]
  p0559 H82-30312

SPEECH
- MT CONVERSATION
- SPEECH DISCRIMINATION
- U SPEECH RECOGNITION

SPEECH RECOGNITION
- Using voice control onboard combat aircraft
  p0926 H82-13056
- Evaluation of a voice recognition system for the NOTAS pilot station function
  [NASA-DR-84487]
  p0966 H82-25235

SPEECH CONTROL
- Procedures and analysis techniques for determining static air minum control speeds
  p0021 H82-12564
- Flight investigations of integrated descent rate control systems
  p0576 H82-14929
- High speed VSCF generator design consideration -- computer aided design for Variable Speed Constant Frequency generator
  p0302 H82-24379
- The effect of critical design parameters on the selection of a VSCF system
  p0302 H82-24381
- Packaging the VSCF system for an aircraft engine environment
  p0230 H82-24383
- Tuning of wind turbines with blade cyclic-attack
  p0461 H82-26822
- Analysis of several glade height and speed control autopilot concepts for a powered lift STOL aircraft
  [NASA-TP-84282]
  p0561 H82-33400

SPEED INDICATORS
- MT AEROMETERS
- MT ROTARY-FILM AEROMETERS
- MT LASER AEROMETERS
- A true air speed sensor for miniature unmanned aircraft
  [NASA-SP-30287]
  p0133 H82-14086
- Evaluation of the helicopter low airspeed system
  LASSIE
  p0251 H82-18172
- Correlation of Preston-tube data with laminar skin friction (Log. R. J12984)
  [NASA-DR-84827]
  p0539 H82-29556

SPEED REGULATION
- U SPEED CONTROL
- U SPEED REGULATORS

SPEED REGULATORS
- Three-engine control system for the prototype EH-101 helicopter
  [BR-TR-SPACE-287]
  p0133 H82-14086
- Evaluation of the helicopter low airspeed system
  LASSIE
  p0251 H82-18172

SPILLING
- Pollution of the soil by aviation gasoline
  [PLAN-79-41]
  p0147 H82-15596
- The biological degradation of spilled jet fuels: A literature review
  [AD-1110758]
  p0461 H82-26873

SPIN STABILIZATION
- A microprocessor-based data acquisition system for stall/spin research
  [NASA-TP-22177]
  p0002 H82-10126
- Wind tunnel investigations for the flat spin of slender bodies at high angles of attack
  [AIAA PAPER 82-0054]
  p0115 H82-17755
- An analytical technique for the analysis of airplane spin entry and recovery
  [AIAA PAPER 82-0243]
  p0164 H82-19796
- Applications of parameter estimation in the study of spinning airplanes
  [AIAA PAPER 82-1305]
  p0487 H82-39000
- Prediction of high alpha flight characteristics utilizing rotary balance data
  [AIAA 82-0053]
  p0510 H82-49083

SPIN REDUCTION
- A criterion for the prediction of the recovery characteristics of spinning aircraft
  [NASA-TP-22251]
  p0267 H82-19223

SPIN STABILIZATION
- Current perspectives on emergency spin-recovery systems
  p0589 H82-43264
- Spintunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft
  [NASA-TP-83236]
  p0252 H82-18183

SPIN TESTS
- USACE spin program
  p0076 H82-14931

A-393
The USAF Test Pilot School high angle of attack and spin training program
[ p0076 A82-14932 ]

Merry spin evaluation of the A-7 airplane configured with automatic maneuvering flaps
[ p0076 A82-14933 ]

P-47A high angle of attack/spin testing
[ p0076 A82-14934 ]

Wind tunnel investigations of the flat spin of slender bodies at high angles of attack
[ [AIAA PAPER 82-0054] p0115 A82-17755 ]

Prediction of high alpha flight characteristics utilizing rotary balance data
[ p0510 A82-40953 ]

Spin behaviour of the Pilatus PC-7 Turbo Trainer
[ p0513 A82-40979 ]

Spin tests of a single-engine, high-wing light airplane
[ [NASA-TP-1927] p0189 N82-16068 ]

A retirement-for-cause study of an engine turbine disk
[ [AD-A109724] p0305 N82-20184 ]

Spiral antennas

Spiral slotted phased antenna array
[ [NASA-CASE-MSC-18532-1] p0476 N82-27558 ]

Spiral wrapping

Mathematical models for the synthesis and optimization of spiral bevel gear tooth surfaces
[ [NASA-JSC-3553] p0012 A82-25516 ]

Spline functions

Development of an efficient procedure for calculating the aerodynamic effects of planform variation
[ [NASA-CR-3489] p0137 N82-14529 ]

Splotting

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[ [AIAA PAPER 81-2405] p0056 A82-13981 ]

Split flaps

Experimental flight test programs for improving combat aircraft maneuverability by maneuver flaps and pylon split flaps
[ p0347 N82-22192 ]

Sock slot ailerons

Spoilers or auxiliary flaps
[ p0241 N82-24973 ]

Spoilers

Flight investigations of integrated descent rate control systems
[ p0076 A82-14929 ]

Unsteady flow patterns associated with spoiler control devices
[ [AIAA PAPER 82-0127] p0115 A82-17798 ]

Basic studies of the flow fields of airfoil-spline-spoiler systems
[ [AIAA PAPER 82-0173] p0189 A82-22060 ]

Experimental study of the flowfield of an airfoil with deflected spoiler
[ [AIAA PAPER 82-0126] p0286 A82-27086 ]

Development of the advanced composite ground spoiler for C-1 medium transport aircraft
[ p0495 N82-35895 ]

Theoretical investigation of the influence of spoiler dynamics on the handling qualities of an aircraft with direct lift control
[ [ESA-TP-7801] p0027 N82-10036 ]

Development and evaluation of automatic landing control laws for light wing loading STOL aircraft
[ [NASA-CR-166160] p0260 N82-10043 ]

System identification of the longitudinal motion of the DFLY HFB 320 research aircraft with particular consideration of control surface effectiveness
[ [ESA-TP-376] p0028 N82-10045 ]

Summary of theoretical considerations and wind tunnel tests of an aerodynamic spoiler for stall proofing a general aviation airplane
[ [NASA-CR-165100] p0183 N82-16046 ]

The effect of a well on the aerodynamics of a spoiler --- wind tunnel flow visualization and pressure measurement
[ [EN-268] p0263 N82-19198 ]

Analysis and flight evaluation of a small, fixed-wing aircraft equipped with hinged plate spoilers
[ [NASA-CR-166247] p0352 N82-22243 ]

The 737 graphite composite flight spoiler flight service evaluation
[ p0356 N82-22314 ]

Hydraulic actuator mechanisms to control aircraft spoiler movements through dual input commands
[ [AIAA-CASE-LAB-1982-1] p0396 N82-24205 ]

B-747 vortex alleviation flight tests: Ground-based sensor measurements
[ [AD-A113621] p0469 A82-27287 ]

Springs

Cavitation inception in slosh valves
[ p0105 A82-16428 ]

Spot holders

Production weld bonding on the A-10 aircraft
[ p0327 N82-28995 ]

A comparison of properties of angle overlap tension joints prepared by ultrasonic welding and other means
[ [AIAA-S-0661] p0335 A82-30091 ]

Fatigue behavior of weld bonded joints
[ p0518 N82-41115 ]

Spray nozzles

The dispersion of drop sizes in gas turbine fuel nozzles
[ p0019 A82-12107 ]

Helicopter icing spray system - Improvements and flight experience
[ p0023 A82-12656 ]

Helicopter Icing Spray System (HISS) nozzle improvement evaluation
[ [AIAA 82-0661] p0266 N82-19208 ]

Sprayed coatings

Improved plasma sprayed T-35Y coatings for aircraft gas turbine applications
[ p0176 N82-20742 ]

Coatings in the aero gas turbine --- sprayed coatings
[ [PBH-90049] p0318 A82-21204 ]

Sprayed protective coatings

U PROTECTIVE COATINGS
U SPRAYED COATINGS
U SPRAYED COATINGS
U SPRAYERS
U SPRAYERS

Spray spectrum transmission

The influence of technology advances on integrated CHI avionics --- Integrated Communication, Navigation, and Identification avionics for military aircraft
[ p0176 N82-20672 ]

Springs

Assessment of the dynamic response of a structure when modified by the addition of mass, stiffness or dynamic absorbers
[ [AHS PREPRINT 81-18] p0442 A82-37790 ]

Squalls

Active gust and maneuver load control concepts with the example of the Airbus A300. Part 1: Explanation of a regular in the time zone of wind gust load decrease and examination of its effectiveness in stochastic gusts

Squeeze films

Experimental evaluation of squeeze film supported flexible rotors
[ [AIAA PAPER 82-GT-233] p0428 A82-35015 ]

Solution to a bistable vibration problem using a plain, uncentralized squeeze film damper bearing
[ [AIAA PAPER 82-GT-281] p0430 A82-35455 ]

The effect of journal misalignment on the oil-film forces generated in a squeeze film damper
[ [AIAA PAPER 82-GT-265] p0430 A82-35457 ]

Engine dynamic analysis with general nonlinear stiffness model including nonlinear elements: I. - Bearing element implementation, overall numerical characteristics and benchmarking
[ [AIAA PAPER 82-GT-292] p0430 A82-35462 ]

Basic technology of squeeze-film dampers for rotor dynamics control
[ [AD-A114042] p0369 N82-23250 ]

Squeezing

U COMPRESSION
U COMPRESSIBILITY
U AERODYNAMIC STABILITY
STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS

STABILITY AUGMENTATION

Guidance for the use of equivalent systems with FL-7-87SC --- for aircraft flight control systems

(AIAA Paper 82-1355) p0498 82-39124

Implicit model-following technique - application to the design of longitudinal stability augmentation systems

p0551 82-43571

Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: FPT C.G. simulation and analysis

p0954 82-15077

A redundancy concept for a digital CSAS

p0251 82-18170

Control law design to meet constraints using SWAPC-synthesis package for active controls

(AIAA Paper 82-33264) p0356 82-22280

Unified results of several analytical and experimental studies of helicopter handling qualities in visual terrain flight

p0363 82-32315

An assessment of various side-stick controller/stability and control augmentation systems for a high map-of-earth flight using piloted simulation

p0356 82-32316

Development of a low rank augmentation system for an energy efficient transport having relaxed static stability

(AIAA Paper 82-15966) p0589 82-32377

STABILITY DERIVATIVES

ST FLIGHT STABILITY TESTS
Subject Index

Experiential investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser

Investigation of the transonic calibration characteristics of turbine static pressure probes (ASME PAPER 82-62-250)

Aerodynamic behavior of a slender slot in a wind tunnel wall

Analyses and wind tunnel tests of a probe used to sense altitude through measurement of static pressure

Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices (data report)

Static and unsteady pressure measurements on a 50 deg clipped delta wing at M = 0.9 --- conducted in the Langley Transonic Dynamics Tunnel

Multistage axial compressor program on tip clearance effects

Static Stability

Shell Stability

Structural Stability

The use of observes on relaxed static stability aircraft

Control law development for a close-coupled canard, relaxed static stability fighter

A unified and generalized definition of static longitudinal stability in aircraft

Modal control of relaxed static stability aircraft (AIAA 82-1524)

Aerodynamic characteristics and store loads of a 1/26 scale F-111 aircraft model with three external store loadings

An analytical study of turbulence responses, including horizontal tail loads, of a control configured jet transport with relaxed static stability

Active control technology in aircraft

Development of a low risk augmentation system for an energy efficient transport having relaxed static stability

Development of methods for assessment of gliding parachute applications

Static Tests

Design features of a sea-based multipurpose S/STOL, STOL, and STOL aircraft in a support role for the U.S. Navy

A comprehensive flight test flyover noise program

Prediction of flyover jet noise spectra from static tests

Static investigations of rotor blades under deadweight and during stationary operation (ISD-265)

Static and dynamic investigations for the model of a wind rotor

Aerodynamic noise generated by jet wing/ flap interactions of the external USB configuration of STOL aircraft, Part 2: Full scale model experiment using F2710 turbofan engine (NAS-TH-68097-P7-2)

Static internal performance of sample expansion-ramp nozzles with thrust vectoring and reversing

Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations

Static Thurbo

Take-off ground roll of propeller driven aircraft

Static

Aerostatics

Electrostatics

Stations

Automatic Weather stations

Chart stations

Earth terminals

Ground stations

Weather stations

Statistical Analysis

Analysis of variance

Correlation coefficients

Covariance

Multivariate statistical analysis

Orthogonality

Probability density functions

Probability distribution functions

Regressions

Sequential analysis

A criterion for determining the causes of wind shear at Punta Raisi airport, on the basis of statistical data from barograph records

Prediction of aircraft interior noise using the statistical energy analysis method

Direct comparison of community response to road traffic noise and to aircraft noise

Submarine rain damage - an environmental analysis technique

Statistical analysis methods for characterizing composite materials

Fatigue life prediction of helicopter pitch link using Kansas life calculation methods

Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protective design criteria

Problems with the use of percentages in the analysis of AARS data ---- Aircrew Automated Escape Systems

FAA statistical handbook of aviation

Statistical analysis and time series modeling of air traffic operations data from flight service stations and terminal radar approach control facilities: Two case studies

Review of rotorcraft accidents 1977-1979

Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques

Motor fragment protection program: Statistics on aircraft gas turbine engine motor failures that occurred in U.S. commercial aviation during 1978

Field studies of the Air Force procedures (NOISECHECK) for measuring community noise exposure from aircraft operations

Statistical Communication Theory

Communication theory

Statistical Distributions

Probability distribution functions

Rayleigh distribution

Statistical Probability

Probability Theory

Stator Blades

Effect of wakes of upstream stator blades on the rotor of an axial flow compressor

Performance of single-stage axial-flow transonic compressor with rotor and stator aspect ratios
STOCHASTIC PROCESSES
- Synthesis of system for evaluating gyrostabilizer state with unknown disturbances
  
- The role of the scale parameter in service load assessment and simulation of aircraft flight
  
- Theory of stochastic optimal control
  - Implementable differential equations for nonlinear filtering
  - Implementable algorithms for attitude and navigation computations
  - Païs's theories for nonstationary processes

STOOL AIRCRAFT
- U SHORT TAKEOFF AIRCRAFT
- U COCKS

STORABLE PROPELLANTS
- ST AIRCRAFT FUELS
- ST LP-1 ACCEPT PROPELLANTS

STORAGE BATTERIES
- MT LEAD ACID BATTERIES
- MT NICKEL CADMIUM BATTERIES

STOCKPILING
- where is cobalt irreplaceable

STRAIN FATIGUE
- G FATTIGUE (MATERIALS)

STRAIN GAUGE BALANCES
- The external balance system of the German-Dutch wind tunnel DW and its strain gage load cells
- An afterbody drag balance - - - transonic wind tunnel gages

STRAIN GAUGES
- Improved techniques for the calibration and measurement of in-flight loads
- Evaluation of crack growth gages for service life tracking

STRAIN RATE
- Environmental and high strain rate effects on composites for engine applications

STRAIN SOFTENING
- U PLASTIC DEFORMATION

STRAINS
- The use of small strakes to reduce interference drag of a low wing, twin engine airplane
- Influence of strakes on coefficients of longitudinal stability
- Unsteady pressure measurements at stall and buffeting
- Hinged strake aircraft control system

STRAIGHT AIRCRAFT
- U EXTERNAL Stores SEPARATION

STRAIGHT STORES
- Operational evaluation of thunderstorm penetration test flights during project Storm Hazards '80

STRAIGHT STORES (METEOROLOGY)
- MT STORES (METEOROLOGY)
- MT THUNDERSTORMS
- Field program operations: Turbulence and gust front

STRAIGHT STORES (MECHANICAL)
- MT STORES (MECHANICAL)
- MT THUNDERSTORMS

STRAIGHT WINGS
- U RECTANGULAR WINGS

STRAIN AGING
- U PRECIPITATION HARDENING

STRAIN DISTRIBUTION
- U STRESSES CONCENTRATION

STRAIN ENERGY METHODS
- A fatigue crack growth theory based on strain energy density factor
STRENGTH OF MATERIALS
STRAIN ANALYSIS
STRAIN-STRESS RELATIONSHIP
STRESS ANALYSIS
STRESS CALCULATIONS
STRESS CONCENTRATION
STRESS CORROSION CRACKING
SUBJECT INDEX

A-400

Subject Index
Turbine blade nonlinear structural and life analysis
[AIAA PAPER 82-1056]
Evaluation criteria for aero engine materials
[0436 A82-36065]
Determination of load spectra and their application for keeping the operational life proof of sporting airplanes
[0516 A82-41010]
The analysis of the thermal-mechanical stress conditions in axisymmetric rotating hot components of aircraft gas turbines
[0541 A82-41686]
An optimum design of fuselage structure
[0546 A82-42533]
Design and analysis of advanced composite structures
[0547 A82-42670]
New molding method of three-dimensional hollow photoelastic model and centrifugal stress analysis of air cooled turbine blades
[0537 A82-11067]
A compilation of stress intensity factor solutions for flawed connector holes
[AD-A108753]
Elastico-plastic finite-element analyses of thermally cycled double-edge wedge specimens
[NASA-TF-1973]
Approach to the fatigue analysis of vertical-axis wind-turbine blades
[0308 A82-20566]
Environmental and High-Strain Rate effects on composites for engine applications
[0571 A82-31499]

STRESS CONCENTRATION

Investigation of the stress-strain state of a rectangular wing section of variable thickness under concentrated loads and heating
[0127 A82-18588]
Material/structure degradation due to fretting and fretting-initiated fatigue
[0222 A82-23771]
More than meets the eye - The oil dot technique
[0286 A82-27114]
Occurrence of fretting fatigue failures in practice
[0325 A82-28543]
A procedure for evaluating fuel composition effects on combustor life
[ASNE PAPER 82-GT-296]
[0430 A82-35465]
Calculation of the cross section properties and the shear stresses of composite rotor blades
[0495 A82-36475]
Ground calibration of a strain-gauged CT-4A aircraft
[AD-A107847]
[0169 A82-16073]
Calculation of the cross section properties and the she stress of composite rotor blades
[0410 A82-25334]

STRESS CORROSION CRACKING

The application of improved aluminium alloys and steels in aircraft structures
[0004 A82-10305]
A new approach to the problem of stress corrosion cracking in 7075-T6 aluminium
[0222 A82-23772]
Corrosion Fatigue --- conferences
[AGARD-CP-316]
Mechanisms of corrosion fatigue --- of high strength aluminium alloys
[0210 A82-17342]
Fracture mechanics based modelling of the corrosion fatigue process
[0210 A82-17343]
Corrosion prevention methods developed from direct experience with aerospace structures
[0212 A82-17359]
Recent developments in materials and processes for aircraft corrosion control
[0212 A82-17361]
New concepts in multifunctional corrosion for aircraft and other systems
[0212 A82-17362]
Design and analysis of advanced composite structures p0567 882-42670
Calculation of the stability and post-buckling behavior of thin shell structures using the finite element method -- German thesis p0577 882-45219
Mathematical model for the maintenance program of modern jet aircraft -- crack detection; inspection intervals [DFVLR-FB-81-(A)] p0025 882-10002
Structural analysis of fuselages with cutouts by finite element method p0032 882-10995
Matrix analysis of wings p0032 882-10998
Integrated analysis of engine structures [NASA-TE-82713] p0041 882-11491
Structural analysis computer programs for rigid multicomponent pavement structures with discontinuities, WESILID and WESILATE. Report I: Program development and numerical presentations [AD-A1049545] p0041 882-11498
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships [NASA-CR-165533] p0190 882-16600
Strength degradation of impact damaged structure p0203 882-17169
Investigations of helicopter structural dynamics and a comparison with ground vibration tests --- using manikin [NASA-UD-303-60-0] p0315 882-21186
Evaluation of micromechanical constitutive models for nonlinear structural analysis -- for aircraft turbine engines [NASA-78-02845] p0398 882-24502
Supplementary studies on the sensitivity of optimized structures [AD-A110996] p0412 882-25548
Bird impact analysis package for turbine engine fan blades [NASA-78-08281] p0460 882-26701
Structures and Dynamics Division research and technology plans, FY 1962 [NASA-78-04450] p0561 882-30566
Environmental and High-Strain Rate effects on composites for engine applications [NASA-78-02802] p0571 882-31149
Development of a Structural Integrity Recording System (SIRS) for US Army AV-13 helicopters [AD-A116027] p0591 882-32364
Nonlinear constitutive theory for turbine engine structural analysis p0613 882-33740

STRICTURAL BEAMS U BEAMS (SUPPORTS)

Design and analysis of advanced composite structures p0567 882-42670
Calculation of the stability and post-buckling behavior of thin shell structures using the finite element method -- German thesis p0577 882-45219
Mathematical model for the maintenance program of modern jet aircraft -- crack detection; inspection intervals [DFVLR-FB-81-(A)] p0025 882-10002
Structural analysis of fuselages with cutouts by finite element method p0032 882-10995
Matrix analysis of wings p0032 882-10998
Integrated analysis of engine structures [NASA-TE-82713] p0041 882-11491
Structural analysis computer programs for rigid multicomponent pavement structures with discontinuities, WESILID and WESILATE. Report I: Program development and numerical presentations [AD-A1049545] p0041 882-11498
Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships [NASA-CR-165533] p0190 882-16600
Strength degradation of impact damaged structure p0203 882-17169
Investigations of helicopter structural dynamics and a comparison with ground vibration tests --- using manikin [NASA-UD-303-60-0] p0315 882-21186
Evaluation of micromechanical constitutive models for nonlinear structural analysis -- for aircraft turbine engines [NASA-78-02845] p0398 882-24502
Supplementary studies on the sensitivity of optimized structures [AD-A110996] p0412 882-25548
Bird impact analysis package for turbine engine fan blades [NASA-78-08281] p0460 882-26701
Structures and Dynamics Division research and technology plans, FY 1962 [NASA-78-04450] p0561 882-30566
Environmental and High-Strain Rate effects on composites for engine applications [NASA-78-02802] p0571 882-31149
Development of a Structural Integrity Recording System (SIRS) for US Army AV-13 helicopters [AD-A116027] p0591 882-32364
Nonlinear constitutive theory for turbine engine structural analysis p0613 882-33740

STRICTURAL BEAMS STBDCTOBAL BEAMS

Optimal subsonic diffuser wall design for arbitrary entry conditions [AIAA PAPER 82-0012] p0115 882-17419
Flutter mode suppression using hyperstable feedback [AIAA PAPER 82-0368] p0120 882-17008
The residual strength criterion for load reduction in the analysis of the NASA Space Shuttle's digital flight control system [AIAA PAPER 82-0369] p0120 882-17009
Highlights of a design concept for a close ground support fighter [AIAA PAPER 82-0411] p0121 882-17532
Design and testing of a new double labyrinth seal [ASME PAPER 81-LPT-58] p0127 882-18452
Optimal shape design of turbine blades [AIAA PAPER 81-DEF-128] p0162 882-19342
Calculation of sensitivity derivatives in thermal problems by finite differences p0181 882-21391
Structural design and construction of the New Technology Wing

One year flight testing of the Transonic Wind Tunnel [AIAA PAPER 82-26541] p0283 882-26541
Composite wing substructure technology on the AV-8B advanced aircraft [NASA-PUB-31728] p0287 882-27128
Composite fasteners - A compatible joining technique for fibrous composites in structural design -- aircraft construction materials p0289 882-27159
Damage tolerance and durability design of composite structures for commercial aircraft p0291 882-27403

Finite element analysis of through the canopy emergency crew escape from the T-38 aircraft [AIAA 82-0705] p0335 882-30076
Integrated structural analysis and design support for advanced launch vehicles [AIAA 82-0675] p0330 882-30144
Damage tolerant design using collapse techniques [AIAA 82-0710] p0339 882-30168
Design, fabrication and test of liquid metal heat-pipe sandwich panels [AIAA PAPER 82-0903] p0373 882-31899
Aircraft carrier - Surface effect ship [AIAA PAPER 82-07-236] p0420 882-35418
Efficient optimum design of structures - Program DOD [AIAA 82-0675] p0376 882-31981
Optimum structural design --- for helicopter [AIAA PAPER 82-0808] p0379 882-33662
An optimum design of fuselage structure [NASA-PUB-31727] p0502 882-40543
Optimality of composite structures for commercial aircraft p0504 882-42533
Design and analysis of advanced composite structures p0507 882-42670
Determination of airplane model structure from flight data by using modified stepwise regression [AIAA PAPER 82-1916] p0508 882-40041
Control design of flexible spacecraft p0509 882-40015
Design of airport pavements for expansive soils [AD-A104660] p0513 882-18412
Design Manual for impact damage tolerant aircraft [AD-A110994] p0522 882-22445
Design of helicopter rotor blades for optimum dynamic characteristics [NASA-CR-169352] p0607 882-33744
New estimation method for flutter or divergence boundary from random responses at subcritical speeds

[HL-TR-6677]

Analysis of a longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle

[NASA-TS-811366]

Structural dynamics: Modified calculations ---

natural and harmonically excited vibrations of modified structures; increased computation efficiency

[ENGT-PWT-81-1]

Ice phobic blind tracking and comparison of vibration analysis techniques

[AD-A108121]

Vibration of structures excited acoustically

[ST-BOCICBAL WEIGHT]

Reduction of structural vibration by a dynamic absorber --- helicopter cabin

[RAE-TR-9200-1001]

Development of vibration qualification test spectra for the F-15 aircraft

[ST-BO-22160]

Approach in dynamic qualification of light helicopter stores and equipment

[ST-BO-22166]

The dynamic qualification of equipment and external stores for use with rotary winged aircraft

[ST-BO-22167]

STOL aircraft structural vibration prediction from acoustic excitation

[ST-BO-22169]

Limiting performance of nonlinear systems with applications to helicopter vibration control problems

[AD-A113239]

User's manual for the coupled rotor/airframe vibration analysis graphics package

[NASA-CR-165857]

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade

[NASA-CR-3615]

STRUCTURAL WEIGHT

Multilevel optimum design of structures with fiber-composite stiffened-panel components

[AIAA PAPER 92-0135]

Optimal shape design of turbine blades

[ASME PAPER 81-DET-126]

Minimum acoustic excitation of a large low-aspect ratio airframe for flutter-free performance

[AIAA PAPER 80-0724]

Some thoughts on design optimization of transport helicopters

[ST-BO-22573]

Comparison of light aircraft with strutted and cantilever wings

[ST-BO-22577]

Integration of a code for aeroelastic design of conventional and composite wings into AC5XNT, an aircraft synthesis program --- wing aeroelastic design (WADS)

[NASA-CR-137805]

Performance deterioration due to acceptance testing and flight loads; T790 jet engine diagnostic program

[NASA-CR-165572]

SHUTS

Self-oscillations of the front caster wheel strut for a given track width under the assumption of the wheel drift hypothesis

[ST-BO-22578]

Multiple pure tone elimination strut assembly --- air breathing engines

[NASA-CASE-PBR-11062-1]

Energy efficient engine: Turbine transition duct model technology report

[NASA-CR-167996]

[ST-BO-33394]

STY

SPACE TRANSPORTATION SYSTEMS

STUDIES

STURM-LOUVILLE OPERATOR

STURM-LOUVILLE THEORY

An algorithm, invariant relative to the initial data, for implementing the polynomial contouring method --- for computer aided design and manufacturing

[STURM-LOUVILLE THEORY]

SUBJECT INDEX

New estimation method for flutter or divergence boundary from random responses at subcritical speeds

[HL-TR-6677]

Analysis of a longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle

[NASA-TS-811366]

Structural dynamics: Modified calculations ---

natural and harmonically excited vibrations of modified structures; increased computation efficiency

[ENGT-PWT-81-1]

Ice phobic blind tracking and comparison of vibration analysis techniques

[AD-A108121]

Vibration of structures excited acoustically

[ST-BOCICBAL WEIGHT]

Reduction of structural vibration by a dynamic absorber --- helicopter cabin

[RAE-TR-9200-1001]

Development of vibration qualification test spectra for the F-15 aircraft

[ST-BO-22160]

Approach in dynamic qualification of light helicopter stores and equipment

[ST-BO-22166]

The dynamic qualification of equipment and external stores for use with rotary winged aircraft

[ST-BO-22167]

STOL aircraft structural vibration prediction from acoustic excitation

[ST-BO-22169]

Limiting performance of nonlinear systems with applications to helicopter vibration control problems

[AD-A113239]

User's manual for the coupled rotor/airframe vibration analysis graphics package

[NASA-CR-165857]

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade

[NASA-CR-3615]

STRUCTURAL WEIGHT

Multilevel optimum design of structures with fiber-composite stiffened-panel components

[AIAA PAPER 92-0135]

Optimal shape design of turbine blades

[ASME PAPER 81-DET-126]

Minimum acoustic excitation of a large low-aspect ratio airframe for flutter-free performance

[AIAA PAPER 80-0724]

Some thoughts on design optimization of transport helicopters

[ST-BO-22573]

Comparison of light aircraft with strutted and cantilever wings

[ST-BO-22577]

Integration of a code for aeroelastic design of conventional and composite wings into AC5XNT, an aircraft synthesis program --- wing aeroelastic design (WADS)

[NASA-CR-137805]

Performance deterioration due to acceptance testing and flight loads; T790 jet engine diagnostic program

[NASA-CR-165572]

SHUTS

Self-oscillations of the front caster wheel strut for a given track width under the assumption of the wheel drift hypothesis

[ST-BO-22578]

Multiple pure tone elimination strut assembly --- air breathing engines

[NASA-CASE-PBR-11062-1]

Energy efficient engine: Turbine transition duct model technology report

[NASA-CR-167996]

[ST-BO-33394]

STY

SPACE TRANSPORTATION SYSTEMS

STUDIES

STURM-LOUVILLE OPERATOR

STURM-LOUVILLE THEORY

An algorithm, invariant relative to the initial data, for implementing the polynomial contouring method --- for computer aided design and manufacturing

[STURM-LOUVILLE THEORY]
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBSONIC FLUTTER</td>
</tr>
<tr>
<td>p0179 AB2-32850 Hysteresis of the normal force of a wing of complex planform under unsteady motion</td>
</tr>
<tr>
<td>p0188 AB2-34157 The unsteady motion of a wing traveling at subsonic speed above a plane</td>
</tr>
<tr>
<td>p0491 AB2-39358 Ejector powered propulsion and high lift subsonic wing</td>
</tr>
<tr>
<td>p0512 AB2-40570 Spanwise distribution of vortex drag and leading-edge suction in subsonic flow controls</td>
</tr>
<tr>
<td>p0516 AB2-41005 Theoretical investigations and experimental researches for higher subsonic two-dimensional compressor cascade</td>
</tr>
<tr>
<td>p0033 HB2-11024 Aeroacoustic theory for noncompact wing-gust interaction [PBDL-81-17]</td>
</tr>
<tr>
<td>p0038 HB2-11071 On the kernel function collocation method in steady subsonic flow for wing with control surfaces</td>
</tr>
<tr>
<td>Calculation of wing-body-macelle interference in subsonic and transonic potential flow</td>
</tr>
<tr>
<td>p0077 HB2-13095 Prediction of subsonic aircraft flows with jet exhaust interactions</td>
</tr>
<tr>
<td>p0079 HB2-13096 Calculation of quasi-stationary aerodynamic force acting on a cascade of oscillating airfoils in subsonic flow</td>
</tr>
<tr>
<td>p0142 HB2-15051 Numerical experiments on unsteady flows through vibrating cascades</td>
</tr>
<tr>
<td>p0142 HB2-15052 Acta Aeronautica et Astronautica Sinica [AD-410282]</td>
</tr>
<tr>
<td>p0312 HB2-21153 The application of subsonic theoretical aerodynamics to active controls — aircraft design [RAE-TR-81060]</td>
</tr>
<tr>
<td>p0320 HB2-21217 The role of coherent structures in the generation of noise for subsonic jets [NASA-CS-168764]</td>
</tr>
<tr>
<td>p0358 HB2-22947 The FFA wing body 81 computer program. A panel method for determination of aerodynamic characteristics at subsonic and supersonic speeds [FFA-TR-10-1601]</td>
</tr>
<tr>
<td>p0406 HB2-25230 Investigation on rotating airfoils [NASA-TR-84456]</td>
</tr>
<tr>
<td>p0413 HB2-26162 Wind tunnel investigations on transcritical airfoils in high subsonic flow [DPYL-FP-82-06]</td>
</tr>
<tr>
<td>p0557 HB2-30296 SUBSONIC FLUTTER Aerodynamicst of compressor blades — Subsonic stall flutter</td>
</tr>
<tr>
<td>p0205 AB2-26993 Investigation of the unsteady airflow on a transport aircraft type airfoil with two interchangeable oscillating trailing edge flaps, at transonic speed and high Reynolds numbers</td>
</tr>
<tr>
<td>p0507 AB2-40909 Damping for turbocharger blade vibrations in subsonic flow</td>
</tr>
<tr>
<td>p0142 HB2-15048 Experiment on active flutter suppression of a cantilever wing [WAL-TR-690]</td>
</tr>
<tr>
<td>p0156 HB2-22282 Subsonic aerodynamic and flutter characteristics of several wings calculated by the SOUSA P1.1 panel method [NASA-TR-88485]</td>
</tr>
<tr>
<td>p0405 HB2-25216 Aerodynamics of compressor blades: Subsonic stall flutter</td>
</tr>
<tr>
<td>p0944 HB2-26189 SUBSONIC SPEED Performance considerations in the design of subsonic cruise missiles [AIAA PAPER 82-0371]</td>
</tr>
<tr>
<td>p0120 AB2-17911 Subsonic and transonic roll damping measurements on basic finner — flanged missile calibration model</td>
</tr>
<tr>
<td>p0165 AB2-19958 Fuel efficient and Mach 0.8, too [AIAA PAPER 82-29774]</td>
</tr>
<tr>
<td>The use of linearized-aerodynamics and vortex flow methods in aircraft design /invited paper/</td>
</tr>
<tr>
<td>p0497 AB2-40294 Thrust modulation methods for a subsonic V/STOL aircraft [NASA-TR-82747]</td>
</tr>
<tr>
<td>p0098 HB2-13112 SUBSONIC WIND TUNNELS Unsteady flow patterns associated with spoiler control devices [AIAA PAPER 82-0127]</td>
</tr>
<tr>
<td>p0115 AB2-17798 Status and capabilities of the National Full Scale Facility 60- by 80-foot wind tunnel modification [AIAA 82-0607]</td>
</tr>
<tr>
<td>p0238 AB2-24676 A new facility and technique for two-dimensional aerodynamic testing [AIAA 82-0608]</td>
</tr>
<tr>
<td>p0238 AB2-24677 Self streaming wind tunnels without computers</td>
</tr>
<tr>
<td>Experimental study of the flowfield of an airfoil with deflected spoiler [AIAA PAPER 82-0126]</td>
</tr>
<tr>
<td>p0286 AB2-27086 Model based study of various configurations of jet crossing a cavity — application to the CFBA 19 wind tunnel of CEPR</td>
</tr>
<tr>
<td>p0363 HB2-33627 Programmable controller system for wind tunnel divergence vessels</td>
</tr>
<tr>
<td>p0543 AB2-41846 Subsonic cascade wind tunnel tests using a compressor configuration of DCA blades [AD-410597]</td>
</tr>
<tr>
<td>p0238 HB2-11069 Studies of air inlets at Reynolds numbers comparable to flight in ONERA's F1 and S1A wind tunnels</td>
</tr>
<tr>
<td>p0096 HB2-13091 Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices (data report) [NASA-CS-165806]</td>
</tr>
<tr>
<td>p0306 HB2-20192 A numerical investigation of two-dimensional, subsonic, linear, wind tunnel interference theory [ABL/AER-NOZ-403]</td>
</tr>
<tr>
<td>p0264 HB2-23199 Wind tunnel of the Institute of mechanics of Moscow State University [NASA-TM-76909]</td>
</tr>
<tr>
<td>p0397 HB2-24213 SUBSTANCES 0 MATERIALS</td>
</tr>
<tr>
<td>SUBSTITUTES Replacement of aboard naval aircraft control surfaces [NASA-IP-1902]</td>
</tr>
<tr>
<td>p0590 HB2-32356 SUBSTITUTION 0 SUBSTITUTES Substructure program for analysis of helicopter vibrations [ABSTRACT 82-81]</td>
</tr>
<tr>
<td>p0493 HB2-37795 SUBTROPICAL REGIONS &amp; TROPICAL REGIONS SUBJCTION Vortex lift augmentation by suction on a 60 deg swept gothic wing [AIAA PAPER 82-0231]</td>
</tr>
<tr>
<td>p0117 AB2-17856 Recent sidewall boundary-layer investigations with suction in the Langley 0.3-s Transonic Cryogenic Tunnel [AIAA PAPER 82-0234]</td>
</tr>
<tr>
<td>p0117 AB2-17858 Crossflow shock on the suction side of a flat delta wing with supersonic leading edges [AIAA 82-29569]</td>
</tr>
<tr>
<td>Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the suction analogy [AIAA PAPER 82-1385]</td>
</tr>
<tr>
<td>p0489 AB2-39141 Aerodynamic development of laminar flow control on swept wings using distributed suction through porous surfaces</td>
</tr>
<tr>
<td>p0505 AB2-40894 Spawise distribution of vortex drag and leading-edge suction in subsonic flow [NASA-TR-84105]</td>
</tr>
<tr>
<td>p0156 AB2-40005 Amplified crossflow disturbances in the laminar boundary layer on swept wings with suction [NASA-TR-1902]</td>
</tr>
<tr>
<td>p0041 HB2-11391 A theoretical investigation of wing rocking [NASA-CS-165058]</td>
</tr>
<tr>
<td>p0140 HB2-15031 A new method of estimating the lateral wall effect on the natural incidence due to the suction at side walls</td>
</tr>
</tbody>
</table>
SUPERSONIC AIRCRAFT

SPF of high strength aluminum structures [AIAA 81-2176] p0022 A82-23754
Superplastic forming for complex aircraft structures [AD-A1107760] p0328 A82-28997
Superplastic aluminum evaluation [AD-A1107760] p0210 A82-17338
Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures [AIAA-TC-165627] p0260 A82-19358
SPF/DB titanium concepts for structural efficiency for HC [AIAA-TC-165627] p0302 A82-20154
SPF/DB titanium LFC porous panel concept [AIAA-TC-165627] p0302 A82-20155

SUBJECT INDEX

Correlation effects in advanced blended supersonic transport concept [NASA-TR-82-0266] p0565 A82-31294
SUPersonic AIRFOILS
Research model wing/tail fabrication technique -- transonic wind tunnel 1/7.5-scale model [AD-A114101] p0524 A82-28288

SUPersonic CORROSION
Numerical investigation of supersonic base flow with parallel injection -- in scramjet combustors [AIAA PAPER 82-1001] p0375 A82-31960
Effect of vacuum exhaust pressure on performance of BBD ducts at high U-field [NASA-TR-82-02750] p0101 A82-13908

SUPersonic CommerciAL AIR TRANSPORT

SUPersonic CRUISE AIRCRAFT RESEARCH
Piloted simulator evaluation of a relaxed static stability fighter at high angle-of-attack [AIAA PAPER 82-1295] p0486 A82-39082
Upper Vortex Flap - A versatile surface for highly swept wings [AIAA PAPER 82-1295] p0515 A82-41002
Analytical study of vortex flaps on highly swept delta wings [AIAA PAPER 82-1295] p0515 A82-41003
Wind-tunnel investigation of vortex flaps on a highly swept interceptor configuration [AIAA PAPER 82-1295] p0516 A82-41004

SUPersonic DIFFUSERS
Conditions of pulsed starting of supersonic wind tunnel diffusers [AIAA PAPER 82-0724] p0274 A82-25795
Casing treatments on a supersonic diffuser for high pressure ratio centrifugal compressors [HASA-TP-84519] p0274 A82-35331
Starting transients in supersonic nozzles and nozzle-diffuser assemblies [HASA-TP-84519] p0406 A82-25226

SUPersonic DRAG
Problems in correlation caused by propulsion systems [AIAA PAPER 82-0724] p0404 A82-25202

SUPersonic FLIGHT
Optimal flight paths for winged, supersonic flight vehicles -- Extension to the case where thrust can be vectored [NASA-TR-82-0366] p0005 A82-10310
Optimal trajectories in supersonic flight [NASA-TR-82-0366] p0119 A82-17906
An aerodynamic and signature shaping technique for highly swept interceptor configurations [NASA-TR-82-0373] p0120 A82-17912
Store separation from cavities at supersonic flight speeds [AIAA PAPER 82-0373] p0165 A82-22096
Military aircraft [AIAA PAPER 82-0373] p0165 A82-22096

Wing design for supersonic cruise/transonic maneuver aircraft [AIAA PAPER 82-0373] p0177 A82-41021
Supersonic cruise/transonic maneuver wing section development study [NASA-TR-84521] p0048 A82-26256
Measurements of mean static pressure and far field acoustic of shock containing supersonic jets [NASA-TR-84521] p0600 A82-31510

SUPersonic FLOW
Pressure distribution on an ogive wing in...
SURFACE TO AIR MISSILES
- PATRIOT MISSILE
- Duplication of radome aerodynamic heating using the Central Receiver Test Facility solar furnace

SURFACE TO SURFACE MISSILES
- HATBM MISSILES
- CRUISE MISSILES
- RT MISSILE
- ACCESS LOW ALTITUDE MISSILE

SURFACE TREATMENT
- U SURFACE FINISHING
- SURFACE VEHICLES
- AIRCRAFT CARRIERS
- AUTOMOBILES
- ELECTRIC AUTOMOBILES
- MOTOR VEHICLES
- SCOOTERS
- CONCRETE SURFACE EFFECT SHIPS
- HELICOPTERS (Vehicles)
- TRACKED VEHICLES
- TRUCKS

SURFACE WAVES
- ELECTROMAGNETIC SURFACE WAVES
  - A global atlas of GOES-3 significant waveheights and comparison with data using the GOES-3 data
  - [NASA-CS-156882]

SURFACES
- A study of a numerical method for evaluating dynamic stability of flexible forward swept wing
  - [NASA-CS-156882]
- Improving the accuracy of the estimates of surfactant content in jet fuels

SURVEYS
- High voltage surge and partial discharge test to evaluate aerospace equipment parts
- Encounters with surge: some experiences of development of axial compressors for gas turbines
- Starting transients in supersonic nozzles and nozzle-diffuser assemblies

SURVEYING
- ABBREVIATIONS
- SURVEYING
- SURVEYS
- SUBSURFACE SURVEYS
- SUBSURVEYS

SUBSURFACE SURVEYS
- GEOFISICAL SURVEYS
- GEOLOGICAL SURVEYS

SWEPT FORWARD WINGS

FEED QUALITY/PROCESSING STUDY - Volume 2 - Appendix: Tank I literature survey

SURVIVAL
- HASEP - Survival from crashed Navy helicopters
- Value of survivability and recoverability of flight data recorders - cost methodology
- Aircraft fire safety
- Aircraft fire mishap experience/crash fire scenario quantitation
- Human response to fire
- Fuel system protection methods
- Aircraft post crash fire reduction/survivability enhancement from a manufacturer's viewpoint

SURVIVAL EQUIPMENT
- Evaluation of a selected group of anti-exposure garment configurations for their effects on the operational performance and survivability of naval aircrewmens
- Lear Fan 2100 egress system
- Improving air carrier water survival
- Development of a backpack survival kit for ejection seats
- Elastic suspension of a wind tunnel test section
- Suspension systems (vehicles)
- Preliminary study of ground handling characteristics of Boeing Quad Rotor (BQR)

SURFACE WAVES
- Electromagnetic surface waves

SURFACE WAVE IDEX
- VEHICLES
- SPACE TO SURFACE MISSILES

SURFACE WAVES TO SPACE WAVE BOMBS
- IMPROVING THE ACCURACY OF THE ESTIMATES OF SURFACTANT CONTENT IN JET FUELS

SWEPT WING ANGLES
- SWEEPBACK
- SWEEPBACK ANGLES

SWEEPBACK
- A summary of experimental data on wing characteristics at transonic speeds
- Evaluation of a selected group of anti-exposure garment configurations for their effects on the operational performance and survivability of naval aircrewmens

SWEEPBACK ANGLES
- SWEEPBACK
- SWEEPBACK WINGS
- SWEEPBACK WINDS
The United States Air Force Automated Vibration Diagnostics System (AVD) for improved jet engine maintenance

Estimation of the performance of nonstationary discontinuous control systems for flight vehicles

Efficient part reasor processes --- from molds to parts

Horses for courses in EPF operations --- system components design and development in terms of performance and cost

Electronic warfare system measure of effectiveness

On-board computer progress in development of A-70 flight testing program

Prediction of off-design performance of turbo-shaft engines: a simplified method

Measurement techniques used to assess the installed power of a helicopter engine

Component design and development for future helicopter engines

Amusement of aircraft capacitive circuit medium wave antennas according to their effectiveness

SUBJECT INDEX

SYSTEM EFFECTIVENESS

Aircraft alerting systems standardization study

Instrumentation to determine the suitability of RLV systems for helicopter navigation in the national airspace system /NAS/

Coordinate transformation in FLISA --- algorithms and error analysis of Position Location and Reporting System

Experience with flight simulators - Training effectiveness-future developments

Calibrated and uncalibrated inertial navigation system performance in validation and jammed global positioning systems environments

The Global Positioning System Simulator -- facility for testing in simulated wide range environments

APPLICATION INDEX

SYSTEBIC IDENTITY

Resonate convective weather systems and aviation operations

[ATAA PAPER 82-0015]

Post analysis of aircraft accident environments

[ATAA PAPER 82-0580]

SYSTEBIC APERTURE RADAR

Enhanced F-15 air-to-ground flight demonstrations

[ATAA PAPER 82-0213]

Pave Mover Flight Test Program

[ATAA PAPER 81-2492]

Inverse SAR and its application to aircraft classification

[ATAA PAPER 80-14671]

F-15 SAR

[ATAA PAPER 82-14938]

Synthetic aperture radar target simulator

[ATAA-CASE-FPO-15024-1]

SYSTEBIC FIBERS

Ray glass fibers

[21S1-CH-165367] p0099 H82-13145

[1D-A105317] p0099 H82-13141

Sensor failure detection system --- for the F100 turbine engine

[ATAA-CASE-ENAV-1] p0057 N82-14481

Instrument failure detection in partially observable systems

[ATAA-CASE-ENAV-2] p0246 H82-19132

Measurement techniques used to assess the installed power of a helicopter engine

[ATAA-CASE-ENAV-3] p0246 H82-19133

Component design and development for future helicopter engines

[ATAA-CASE-ENAV-4] p0269 H82-19453

SYSTEM FAILURES

Extending the limits of reliability theory --- Book

[ATAA-PAPER 82-3131]

Direct digital design method for reconfigurable multivariable control laws for the 7-70 Digitac II aircraft

[ATAA-PAPER 82-3132]

Real-time failure detection of aircraft engine output sensors

[ATAA-PAPER 82-3133]

Instrument failure detection in partially observable systems

[ATAA-PAPER 82-3134]

Maximum likelihood failure detection of aircraft flight control sensors

[ATAA-PAPER 82-3135]

Electronic master monitor and advisory display system test and demonstration report

[ATAA-PAPER 82-3136]

Sensor failure detection system --- for the F100 turbofan engine

[ATAA-PAPER 82-3137]

Description of a dual fail operational redundant strapdown inertial measurement unit for integrated avionics systems research

[ATAA-PAPER 82-3138]

Computer outages at air terminal facilities and their correlation to near miss mid-air collisions (APRD-82-43)

[ATAA-PAPER 82-3139]

SYSTEM IDENTIFICATION

Integrated flight testing based on nonlinear system identification data processing techniques

[ATAA PAPER 81-2490]

The use of frequency methods in rotorcraft system identification

[ATAA PAPER 81-2491]

Future directions in CHI integrated avionics
descriptions of a dual fail operational redundant strapdown inertial measurement unit for integrated avionics systems research

[ATAA PAPER 81-2492]

Parameter estimation applied to general aviation aircraft - a case study

[ATAA PAPER 81-2493]

Identification of the form of motion of an aircraft

[ATAA PAPER 81-2494]

Development of low-order model of an F-16 aircraft by system identification

[ATAA-CASE-ENAV-1]

Diagnostics System /AVID/ for improved jet engine maintenance

[ATAA-CASE-ENAV-2]

FAR/DO-340

[ATAA-CASE-ENAV-3]

ATS systems

[ATAA-CASE-ENAV-4]

SYSTEM IDENTIFICATION

Integrated flight testing based on nonlinear system identification data processing techniques

[ATAA PAPER 81-2490]

The use of frequency methods in rotorcraft system identification

[ATAA PAPER 81-2491]

Future directions in CHI integrated avionics
descriptions of a dual fail operational redundant strapdown inertial measurement unit for integrated avionics systems research

[ATAA PAPER 81-2492]

Parameter estimation applied to general aviation aircraft - a case study

[ATAA PAPER 81-2493]

Identification of the form of motion of an aircraft

[ATAA PAPER 81-2494]

Development of low-order model of an F-16 aircraft by system identification

[ATAA-CASE-ENAV-1]

Diagnostics System /AVID/ for improved jet engine maintenance

[ATAA-CASE-ENAV-2]

FAR/DO-340

[ATAA-CASE-ENAV-3]

ATS systems

[ATAA-CASE-ENAV-4]
A new facility and technique for two-dimensional aerodynamic testing
(AIAA 82-0608)
Lightning detection and ranging
(AIAA 82-29477)
Design of higher harmonic control for the ABC
(AIAA 82-26367)
The role of modern control theory in the design of controls for aircraft turbine engines
(AIAA PAPER 82-0322)
No-Tail-Rotor helicopter
(AIAA 82-26526)
A system design for a multispectral sensor using two-dimensional solid-state imaging arrays
(AIAA 82-31991)
A practical approach to the design of multivariable control strategies for gas turbines
(AIAA PAPER 82-07-150)
Assembly of aircraft instruments --- Russian book
(AIAA 82-36590)
Simplified digital design tools
(AIAA 82-37034)
Design and evaluation of a state-feedback vibration controller
(IEEE PAP 81-10)
A design criterion for highly augmented fly-by-wire aircraft
(AIAA 82-1570)
The use of differential pressure feedback in an automatic flight control system
(AIAA 82-1596)
Avoiding the pitfalls in automatic landing control system design
(AIAA 82-1599)
Application of multivariable model following method to flight controller
(AIAA PAPER 82-1349)
A practical approach to the incorporation of technical advances in avionics
(AIAA 82-0086)
Design and experience with a low-cost digital fly-by-wire system in the SB-608 test program
(AIAA 82-10587)
Design of a longitudinal ride-control system by Zakian's method of inequalities
(AIAA 82-44114)
Multivariable analysis and design techniques
(AGARD-LS-117)
The need for multivariable design and analysis techniques
(AIAA 82-10046)
Design of high integrity multivariable control systems
(AIAA 82-10049)
A geometric approach to multivariable control system synthesis
(AIAA 82-10055)
Multivariable design: The optimization of approximate inverses
(AIAA 82-10056)
Design considerations for optimal flight control systems
(AIAA 82-11077)
Design techniques for multivariable flight control systems
(AIAA 82-11078)
Application of nonlinear systems inverses to automatic flight control design: System concepts and flight evaluations
(AIAA 82-11078)
Design for active and passive flutter suppression and gust alleviation
(NASA-CR-2442)
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)
(AD-A105510)
ADAMS executive and operating system
(AD-A108924)
Research and technology annual report, 1981
(NASA-TM-81333)
The influence of sensor and actuator characteristics on overall helicopter flight control system design
(AIAA PAPER 82-07-150)
Transport aircraft cockpit standardization (Federal Aviation regulations part 25)
(AD-A108924)
Applications of system identification methods to the prediction of helicopter stability, control and handling characteristics
(AIAA 82-19207)
The integration of multiple avionic sensors and technologies for future military helicopters
Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry
[AIAA 82-2318]
p0012 882-25506
Air-ground attack: axes of research for airborne systems
[p0070 882-27295
Pave Low VIII integrated strike avionics system
[p0071 882-27280
Tactical systems approach to transition of 2nd echelon moving targets using real time sensors
[p0072 882-27306
Multifunction multimode airborne radio architecture study
[AD-111427]
p0528 882-28523
Problems related to the integration of fault tolerant aircraft electronic systems
[NASA CR-165926]
p0530 882-29022
Wind tunnel capability related to test sections, cryogenics, and computer wind tunnel integration
[AGARD-AB-17]
p0538 882-29334
SYSTEMS MANAGEMENT
Redundancy management of skewed and dispersed inertial sensors
[AIAA 81-2296]
p0050 882-13503
Preliminary functional description of integrated flow management for air traffic control systems
[AD-109090]
p0313 882-21717
Special investigation report: Air traffic control systems
[EBZ-136276]
p0523 882-28277
SYSTEMS SIMULATION
Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems
[AIAA 81-2205]
p0003 882-10143
Simulation study of a hybrid intradrop altitude and heading reference system
[p0022 882-12641
Avionics implications from weapon system operational utility studies on manned air combat simulators
[AIAA 81-2230]
p0047 882-13463
The design and implementation of a canned scenario function for the F-16 dynamic system simulator
[p0066 882-14678
Strapdown inertial reference systems performance analysis
[p0066 882-14682
A failure detection and isolation system for tactical aircraft with separated IBDs
[p0066 882-14684
The use of observers on relaxed static stability aircraft
[p0068 882-18740
Computer modeling of an aircraft HVDC electrical system
[p0073 882-14819
Digital simulation of aircraft electrical generating systems by means of Spruce program
[p0073 882-14820
Real-time simulation of helicopter IFX approaches into major terminal areas using BNAV, MLS, and CDTI
[AIAA PAPBR 82-0266]
p0118 882-17866
JIDS RELAY network off-line simulation
[p0123 882-18153
FIBS engineering development testing - early results
Position Location Reporting System with data communication network for community users in tactical environment
[p0124 882-18157
Radar environment simulation for software test
[p0158 882-19245
Real-Time Simulation Computation System for digital flight simulation of research aircraft
[p0163 882-19260
The simulation study on a redundant flight control system
[p0185 882-22120
Automated radar performance evaluation in the Radio Frequency Simulation System /RTSS/ at NICON
[p0281 882-26671
TURBOFANS - A programming language for the performance simulation of arbitrary gas turbine engines with arbitrary control systems
[ASME PAPER 82-GT-200]
p0427 882-35396
Problems in the simulation of correlation-extremal navigation systems
[p0492 882-39403
Sensor stabilization requirements of IFP's - A simulation study
[p0494 882-39741
FA-18 weapons system support facilities
[p0498 882-17120
SYSTEMS STABILITY
A stable decentralized filtering implementation for JIDS Relay --- stable community relative navigation
[p0124 882-18156
Evaluation of the effect of elastomeric damping material on the stability of a bearingless main rotor system
[p0280 882-26394
T-2 AIRCRAFT
Development on graphite/epoxy T-2 nose landing gear door
[p0495 882-39893
Design, fabrication and qualification of the T-2 composite rudder
[p0495 882-39894
T-33 AIRCRAFT
An application of invariance principle to pilot model for T3-33 aircraft with variable coefficients and delays
[AAIA PAPER 82-0367]
p0120 882-17907
T-37 AIRCRAFT
USAF bangarlor environmental noise data handbook. Volume 148, T-37B in-flight crew noise
[AD-110943]
p0540 882-30031
T-38 AIRCRAFT
A ballistic design model for initiators for aircraft personnel escape systems
[p0080 882-14984
Effect on surface pressures of trapezoidal holes in a T-38 stabilator
[p0113 882-17602
Finite element analysis of through the canopy emergency crew escape from the T-38 aircraft
[AIAA 82-0705]
p0335 882-30996
SEL and BPHL noise duration coefficients for the 747 and T-38 aircraft
[NASA-AM-63214]
p0042 882-11860
T-56 ENGINE
Next generation turboprop gearboxes
[ASME PAPER 82-GT-216]
p0428 882-35418
Results of 756 engine performance monitoring trial on Hercules aircraft, February - July 1977
[RNL-ECN-ENG-TECH-MEMO-1909]
p0536 882-29322
TABLES (DATA)
BBG/Selser. 4 stage transonic compressor
[p0206 882-17197
Experimental investigation of turbine engine wall heat transfer. Volume 2: Linear and annular cascade summary data sets
[AD-110332]
p0317 882-21200
Update of the summary report of 1977-1978 task force on aircrew workload
[AD-112547]
p0448 882-26528
Flight attendant injuries: 1971-1976
[AD-111409]
p0531 882-29274
TABLES (CONTROL SURFACES)
Tactile tab excitation system for the BAe 146
[p0062 882-14363
TACAN
Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems
[AIAA 81-2205]
p0003 882-10143
Terminal area automatic navigation, guidance, and control research using the Microwave Landing System (MLS). Part 2: A comparison of waypoint guidance algorithms for BNAV/MLS transition
[NASA CR-3512]
p198 882-16060
TACTICAL AIR NAVIGATION U TACAN
The subject index includes entries such as:

- **TACTICS**
  - Review of practical experience on combat aircraft maneuverability
  - Tactical systems approach to interdiction of 2nd echelon moving targets using real time sensors

- **TACTILE DISCRIMINATION**
  - A tactical display aid for primary flight training

- **TAIL ASSEMBLIES**
  - Experimental study of empennage snap-through vibrations
  - Determining hinge moments and empennage aerodynamic forces from flight data for Learjet airplanes
  - Determination of rotor wake induced empennage airloads
  - Tail versus canard configuration - An aerodynamic comparison with regard to the suitability for future tactical combat aircraft

- **TAIL ORIENTATIONS**
  - Effect of downwash on the induced drag of canard-wing combinations

- **TALLER AIRCRAFT**
  - F-106 aircraft
  - Tail configurations for highly maneuverable combat aircraft

- **TAIL ASSEMBLIES**
  - Tail configurations for highly maneuverable combat aircraft

- **TAIL ORIENTATIONS**
  - Determining hinge moments and empennage airloads parameters from flight data for Learjet airplanes
  - Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.60, 2.36, and 3.70.

- **TANKERS**
  - Tandem rotor helicopters

- **TAIL ASSEMBLIES**
  - Tail configurations for highly maneuverable combat aircraft
  - Concept studies of an advanced composite helicopter fin

- **TAPE MEASUREMENT**
  - A method for measuring takeoff and landing performance of aircraft, using an inertial measuring system

- **TAIL ORIENTATIONS**
  - Analysis and Monte Carlo simulation of near-terminal aircraft flight paths

- **TAIL ASSEMBLIES**
  - Analysis of transient data from aircraft gas turbine engines using AITOS

- **TAPE RECORDERS**
  - Alert aircraft roll over chocks

- **TAIL ASSEMBLIES**
  - Tail configurations for highly maneuverable combat aircraft

- **TAIL ASSEMBLIES**
  - Analysis of tapered-land hybrid aerostatic journal bearings
The optical recognition of sea targets as a

Target acquisition system/air-to-surface weapon

Tracking of low-altitude targets by a combined

x/F-airband radar system

Optimal target designation techniques

Medium RF performance analysis —

Pulse-Repetition Frequency

Target acquisition system/air-to-surface weapon

Computability analysis

[TIAA 82-0370]

Target tracking using area correlation

Optical head-up display

Medium frequency airborne target recognition computer

Target recognition

Optical, infrared, and other sensors for target

Identification and parameter estimation

Applications of adaptive estimation to target

Tracking

[AD-A102937]

Target tracking using area correlation

[AD-A107490]

Attribute requirements for a simulated flight

scenario microcomputer test

[AD-A115676]

Alternative employment concepts for remotely

Piloted Vehicle (RPV) FLIR/TV mission payload

[AD-A117067]

A new approach to radar plot extraction for AFC

applications

[F-15 SAR]

A new approach to radar plot extraction for AFT

applications

P-15 SAR

Radiofrequency measurements at 80 GHz

A multifrequency adaptive radar for detection and

identification of objects — Results on

Preliminary experiments on aircraft against a

Sea-clutter background

Target acquisition system/air-to-surface weapon

Computability analysis

[TIAA 82-1610]

The optical recognition of sea targets as a

Function of surrounding and observation

parameters in air to water observations

[AD-A117397]

Take (Data Reduction)

Target Acquisition

The TADS/PNVS 'eyes' for the AH-64 attack helicopter

Target acceleration modeling for tactical missile

guidance

([AIAA Paper 82-0370])

[Target Acquisition System/Air-To-Surface Weapon]

Tracking of low-altitude targets by a combined

x/F-airband radar system

Optimal target designation techniques

Medium RF performance analysis —

Pulse-Repetition Frequency

Target acquisition system/air-to-surface weapon

Computability analysis

([AIAA 82-1610])

Optical head-up display

Medium frequency airborne target recognition computer

Target recognition

Optical, infrared, and other sensors for target

Identification and parameter estimation

Applications of adaptive estimation to target

Tracking

[AD-A102937]

Target tracking using area correlation

Optical head-up display

Medium frequency airborne target recognition computer

Target recognition

Optical, infrared, and other sensors for target

Identification and parameter estimation

Applications of adaptive estimation to target

Tracking

[AD-A102937]
Advanced composites integral structures meet the challenge of future aircraft systems. [AIAA-82-1051] p0430 482-35479


Engine industry cost considerations for emerging technologies [AIAA-82-27398] p0291 882-27429

Precision casting for gas turbine engines [AIAA-82-27398] p0292 882-27429

Simple vs. sophisticated TacAir avionics. II -- Soviet TacAir avionics technology [AIAA-82-32519] p0305 882-32519

Advanced engine technology and its influence on aircraft performance [AIAA-82-28515] p0298 882-28515

Hydrogen economy assessment for long-term energy systems in Japan [AIAA-82-3309] p0378 882-3309

Forward-swept-wing technology [AIAA-82-3309] p0381 882-3309

The ubiquitous helicopter [AIAA-82-33116] p0385 882-33116

X-wing and the Navy V/STOL initiative [AIAA-82-33116] p0385 882-33116

Wall ABC technology produce the next-generation helicopter [AIAA-82-33116] p0385 882-33116

Technical trends in the civil aircraft and helicopter industry [AIAA-82-33120] p0387 882-33120


Development of hybrid gas turbine bucket technology [AIAA-82-35337] p0424 882-35337

Technology advancements for energy efficient aircraft engines [AIAA-82-35479] p0430 882-35479

Canadian rotary wing technology development [AIAA-82-39731] p0493 882-39731

On the state of technology and trends in composite materials in the United States [AIAA-82-39882] p0495 882-39882

Touchedown technology --- large aircraft landing gear stress [AIAA-82-40057] p0496 882-40057

Civil helicopter propulsion system reliability and engine monitoring technology assessments [AIAA-82-40518] p0499 882-40518

Support of the HH-65A - The impact of advanced technology of V/STOL systems upon existing product support [AIAA-82-40581] p0501 882-40581

Recent advances in the performance of high bypass ratio fans [AIAA-82-40891] p0505 882-40891

Advanced technologies applied to reduce the operating costs of small commuter transport aircraft [AIAA-82-40915] p0508 882-40915


Turboprop design - Now and the future [AIAA-82-40956] p0512 882-40956

New technology for the next generation of commercial transports - Real or imaginary [AIAA-82-41007] p0516 882-41007

A history of aerocarriers and aviation in Russia - In the period up to 1914 /2nd revised and enlarged edition/ --- Russian book [AIAA-82-42066] p0544 882-42066

The testing of new technologies with the aid of the Alpha Jet aircraft [AIAA-82-43326] p0552 882-43326

The technology of the assembly of engines for flight vehicles --- Russian book [AIAA-82-45765] p0578 882-45765

The choice of technology for ATC radars, I Transmitters [AIAA-82-45981] p0581 882-45981

Jet fuel locks to shale oil: The 1980 technology review [AD-A1004818] p0600 882-11228

...
TEMPERATURE DEPENDENCE

Control of gas turbine power transients for improved turbine airflow durability [AIAA PAPER 82-1192] p0416 A22-35087
Gas turbine airflow control for optimum heat recovery [ASME PAPER 82-07-83] p0423 A22-35329

TEMPERATURE DISTRIBUTION
Investigation of the stress-strain state of a rectangular wing section of variable thickness under concentrated loads and heating [ASME PAPER 82-18508] p0127 A22-18508

An experimental and analytical study of mixing flow of turbofan engine exhaust through circular and 2-dimensional mixers/mixing [AIAA PAPER 82-0130] p0266 A22-27007

Analysis of the temperature field of a baffle-cooled gas-turbine-engine blade under conjugated boundary conditions [ASME PAPER 82-20143] p0295 A22-20143

Thermal stability analysis for conical shells with variable parameters [ASME PAPER 82-29044] p0334 A22-29044

Temperature fields in three-layer panels with a honeycomb filler during transient heating [ASME PAPER 82-34135] p0287 A22-34135

Engine superficial temperature and infrared signature [AIAA PAPER 82-18136] p0247 A22-18136

Tests and analysis of a vented D thrust deflecting nozzle on a turbofan engine — conducted at the outdoor aerodynamic research facility of the Ames Research Center [NASA-CR-166239] p0301 A22-20143

TEMPERATURE EFFECTS

Radome aerodynamic heating effects on boresight error [ASME PAPER 82-26465] p0261 A22-26465

Service sensitivity of polysulfide sealants [ASME PAPER 82-27040] p0291 A22-27040

The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades [AIAA PAPER 82-28019] p0295 A22-28019

A procedure for evaluating fuel composition effects on combustor life [ASME PAPER 82-07-256] p0630 A22-35465

The effect of temperature ratios on the film cooling process [ASME PAPER 82-07-305] p0630 A22-35470


Study of VDI in ground-effect flow field including temperature effect [NASA-CR-166258] p0460 A22-25170

TEMPERATURE Fields

TEMPERATURE INDICATORS

u INDICATING INSTRUMENTS

Temperature Measurement

In-situ calibration of flight heat transfer instrumentation [ASME PAPER 82-228-13] p0111 A22-10921

A study of potentially low cost millimeter-wave radiometric sensors [AIAA PAPER 82-01929] p0151 A22-10942

Dilution jet behavior in the turn section of a reverse flow combustor [AIAA PAPER 82-0192] p0167 A22-20291


Adaptation of a turbine test facility to high-temperature research
THERMAL CONTROL COATINGS
Development of improved high temperature coatings for In-792 + HIP
([NASA-CR-165395])
The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components
([PRR-50076])
THERMAL COBOLTUS
U CONVECTIVE FLOW
THERMAL CYCLING TESTS
7000 - Modern development test techniques, lessons learned and... ([AIAA PAPER 82-1183])
Elastic-plastic finite element analyses of thermally cycled double-edge wedge specimens
([NASA-TP-1973])
THERMAL DECOMPOSITION
Thermal decomposition of aviation fuel
([SAE PAPER 82-07-27])
Deposit formation in hydrocarbon fuels
([SAE PAPER 82-07-49])
THERMAL DEGRADATION
Effects of 50,000 hours of thermal aging on graphite/epoxy and graphite/polyimide composites
([AIAA 82-057])
Quantification of the thermal environment for externally carried aircraft stores and ordnance
([AIAA 82-057])
THERMAL EFFECTS
U TEMPERATURE EFFECTS
THERMAL EFFICIENCY
U THERMOELECTRIC EFFICIENCY
THERMAL EMISISON
A light helicopter for night firing
([SIAAS-82-210-105])
Quantification of the thermal environment for externally carried aircraft stores and ordnance
([AIAA 82-057])
THERMAL EXPANSION
Thermal expansion accommodation in a jet engine frame
([AIAA 82-11999])
A method for predicting the lifetime of gas turbine blades
([AIAA 82-15882])
THERMAL FATIGUE
Thermal expansion accommodation in a jet engine frame
([AIAA 82-11999])
Study of the load-carrying capacity of gas-turbine engine impellers under low-cycle loading at normal and high temperatures
([AIAA 82-15882])
THERMAL STRESSES
Automated calculation of the stressed state of shell systems under geometrical and thermal loading
([AIAA 82-1926])
A new thermal and trajectory model for high altitude balloons
([AIAA 82-1926])
Thermal stability analysis for conical shells with variable parameters
([AIAA 82-29944])
THERMAL STABILITY
At temperature dependence
A concept for a high-accuracy, low-cost accelerometer
([AIAA 82-14605])
Calculation of the stability of crosswind-reinforced cylindrical shells
([NASA-CR-165395])
Deposit formation in liquid fuels. I - Effect of coal-derived Lewis bases on storage stability of Jet A turbine fuel
([AIAA PAPER 81-1926])
THERMAL THERMOCHMICAL PROPERTIES
Failure analysis of silica phenolic nozzle liners
([AIAA 82-30087])
An optical data link for airborne scanning system
([AIAA 82-21222])
Thermal protection
Calculation of sensitivity derivatives in thermal problems by finite differences
([AIAA PAPER 82-11999])
Progress in protective coatings for aircraft gas turbines: A Review of NASA sponsored research
([NASA-TR-82740])
Research and Technology
([NASA-TR-83221])
THERMAL RESISTANCE
Design analysis of high temperature transparent windshields for high performance aircraft
([NASA-PAPER B-1-ENAS-5])
Test methodology for evaluation of fireworthy aircraft seat cushions
([NASA-CR-165395])
THERMAL SIMULATION
A new thermal and trajectory model for high altitude balloons
([AIAA 82-1926])
Modelling of thermal effects when investigating the thermal fatigue life of the blades of a gas-turbine engine
([AIAA 82-46832])
THERMAL TRANSPORT
Thermal-barrier-coated turbine blade study
([NASA-CR-165395])
Formulation and characterization of polyimide resilient forms of various densities for aircraft seating applications
([NASA-CR-16721])
THERMAL VIBRATION
Deposition and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine-engine disk alloy
([AIAA 82-21636])
Effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades
([AIAA 82-28019])
Structural strength of materials and parts of gas turbine engines -- Russian book
([AIAA 82-42063])
Modelling of thermal effects when investigating the thermal fatigue life of the blades of a gas-turbine engine
([AIAA 82-46832])
THERMAL INSULATION
The use of 'Kapton' polyimide film in aerospace applications
([NASA-CR-165395])
Thermal effects of 50,000 hours of thermal aging on graphite/epoxy and graphite/polyimide composites
([AIAA 82-057])
A method for predicting the lifetime of gas turbine blades
([AIAA 82-15882])
A new thermal and trajectory model for high altitude balloons
([AIAA 82-1926])
Thermal stability analysis for conical shells with variable parameters
([AIAA 82-29944])
Composite bonds improve thermal integrity
([AIAA 82-30087])
An alternate test procedure to qualify future fuels for Navy aircraft
([AIAA PAPER 82-1233])
Evaluating the effectiveness of hydrorefining of the low-stability component of T-I fuel
([AIAA 82-36175])
Effect of some nitrogen compounds thermal stability of jet A
([NASA-TR-82740])
THERMAL VIBRATION
Automated calculation of the stressed state of shell systems under geometrical and thermal loading
([AIAA 82-1926])
Problems in the automation of the thermal-vibrometer analysis of flight vehicles
([AIAA 82-27509])
Variational equation of an eccentrically reinforced panel with allowance for nonuniform heating
([AIAA 82-46617])
Acoustic fatigue endurance test of USD flap structure models at elevated temperature
([NASA-TR-82743])
THERMAL VIBRATION
Boundary layer transducers /DCL/ developed for the study of the flow over helicopter rotor blades
([NASA-TR-83221])
THERMOPLASTICITY
Nonlinear structural and life analyses of a combustor liner
[NASA-TM-82866]  p0390 B82-24501
THERMOSETTING RESINS
[TM-70-330]  p0190 B82-16080
Thermosetting analysis in hygrothermoelastic analysis of composites
[ASME PAPEB 82-61-122]  p0428 B82-35409
A method of characteristics solution for finite oscillating supercritical cascade with thicknesses
[ASME PAPEB 82-61-42]  p0428 B82-35409
THICKNESS RATIO
Analysis of shells of straight-wing type
[ASME PAPEB 82-29841]  p0312 B82-21155
THIN AIRFOILS
Infinite span wings
[ASME PAPEB 82-61-222]  p0428 B82-35409
A method of characteristics solution for finite oscillating supercritical cascade with thicknesses
[ASME PAPEB 82-61-42]  p0428 B82-35409
THIN FILMS
High-frequency monitoring of surface layers of metals
[ASME PAPEB 82-61-222]  p0428 B82-35409
THIN LAYER CHROMATOGRAPHY
Determination of antioxidant content in aviation oils using thin-layer chromatography
[ASME PAPEB 82-61-222]  p0428 B82-35409
THIN PLATES
In-plane shear test of thin panels
[ASME PAPEB 82-61-222]  p0428 B82-35409
THIN Walled SHELLS
Automated analysis of the stressed state of shell systems under aerodynamical mechanical and thermal loading
[ASME PAPEB 82-61-222]  p0428 B82-35409
Studies on the stability of thin-walled shells with cutouts /Review/  1
[ASME PAPEB 82-61-222]  p0428 B82-35409
Thermal stability analysis for conical shells with variable parameters
[ASME PAPEB 82-61-222]  p0428 B82-35409
Measurements of heat transfer coefficients on gas turbine components. II - Applications of the technique described in part I and comparisons with results from a conventional measuring
[ASME PAPEB 82-61-222]  p0428 B82-35409
technique and predictions
(AIAA PAPER 82-07-175)
Calculation of the stability and post-buckling
behavior of thin shell underframes using the
finite element method — German text
p0577 A82-85219

THIN WALLS
Experimental stress analysis of a thin-walled
pressurized torus loaded by contact with a
plane — dynamic response of aircraft tires
(AIAA 82-0753)
The behavior of composite thin-walled structures
in dynamic buckling under impact
p0513 A82-40976
Experimental investigation of aerelastic
instability of open field test profiles
metallic structures
p0572 A82-31705

THIN WINGS
HT INFINITE SPAN WINGS
Symmetric flow characteristics of thin rectangular
wings
p0103 A82-16093
Concerning the calculations of the aerodynamic
characteristics of mechanized wings
p0127 A82-18589
Transonic flow past thin wings
p0274 A82-25995
Finite element calculation of the aerodynamic
forces on a vibrating wing in supersonic flow
p0307 A82-34128
The unsteady motion of a wing traveling at
subsonic speed above a plane
p0491 A82-39358
Nonlinear transonic flutter analysis
(AIAA PAPER 81-0506)
Some experimental investigations on transonic
flutter characteristics of thin plate wings
models with sweptback and tapered tips
p0187 A82-16050
Vortex flow correlation — water tunnel tests on
thin slender wings
p0307 A82-20468
Investigation of upwind schemes for finite element
analysis of transonic flow over thin airfoils
p0405 A82-25225
On embedded flow characteristics of sharp edged
rectangular wings
[LOG-C6712]
p0531 A82-29263

THEORIES
U SOLVENTS
THIOSES
Service sensitivity of polysulfide sealants
p0291 A82-27407

THERMICS
Airborne gamma-ray spectrometer and magnetometer
survey. West quadrangle, Alaska, volume 2
[DEER-000312]
p0399 A82-24632

THREAT EVALUATION
Threat perception while viewing single intruder
conflicts on a cockpit display or traffic
information
[NASA-TM-81-41241]
p0190 A82-16076

THREE DIMENSIONAL BOUNDARY LAYER
Transonic three-dimensional viscous-inviscid
interaction for wing-body configuration analysis
(AIAA PAPER 82-0163)
p0116 A82-17616
Measurements of a three-dimensional boundary layer
on a sharp cone at Mach 3
(AIAA PAPER 82-0289)
p0185 A82-22083
Three dimensional turbulent boundary layer
development on a fan rotor blade
(AIAA PAPER 82-1007)
p0375 A82-31965
Accurate numerical solution of compressible,
linear stability equations
(p382 A82-33571
Experimental and theoretical studies of
three-dimensional turbulent boundary layers on
an empennage of a typical transport airplane
p0511 A82-40955
Generation of boundary-conditioning grids around
wing-body configurations using transfinite
interpolation
p0553 A82-44091
The effect of heat transfer on three-dimensional
spatial stability and transition of flat plate
boundary layer at Mach 3
p0581 A82-45877

THREE DIMENSIONAL FLOW
Investigations of the separation behavior on
airfoils at high angles of attack, using linear
lift theory
p0252 NSR-18169
Numerical aircraft design using 3-D transonic
analysis with optimization, volume 3. Part 2:
User's guide to fighter design computer program
[AD-110037]
p0155 A82-21164
Three-dimensional separation and reattachment
[NASA-TP-84221]
p0393 A82-24167

THREE DIMENSIONAL FLOW
HT SECONDARY FLOW
Supersonic nozzles without shocks
p0104 A82-16172
Three-dimensional flow studies on a slotted
transonic wind tunnel wall
(AIAA PAPER 82-0230)
p0117 A82-17855
Three-dimensional calculation of the flow in
helicopter air intakes
[ONERA TP NO. 1981-124]
p0164 A82-19760
Numerical solution of three-dimensional unsteady
transonic flow over wings including
inviscid/viscous interactions
(AIAA PAPER 82-0352)
p0164 A82-19797
Flow visualization using a computerized data
acquisition system
p0179 A82-20792
A split coefficient locally anisotonic scheme for
multiblocksonic flow
(AIAA PAPER 82-0267)
p0184 A82-22082
Transonic wind tunnel wall interference corrections for
three-dimensional models
p0237 A82-24663
Problems of numerical simulation of unsteady
three-dimensional viscous-gas flows in nozzles
p0242 A82-25347
Application of computer generated color graphic
techniques to the processing and display of
three-dimensional fluid dynamic data — for
turbulent mixing nozzle mixing parameter
p0328 A82-29008
Comparison between computations and experimental
data in unsteady three-dimensional transonic
aerodynamics, including aerelastic applications
p0399 A82-30157
Finite volume calculation of three-dimensional
potential flow around a propeller
(AIAA PAPER 82-057)
p0374 A82-31933
Subsonic 3-D surface panel method for rapid
analysis of multiple geometry perturbations
(AIAA PAPER 82-0993)
p0374 A82-31954
Design of finite element grids for the computation of
the three-dimensional transsonic flow around a
wing
(AIAA PAPER 82-1019)
p0375 A82-31972
Wind-tunnel wall interference corrections for
three-dimensional flows
p0379 A82-32847
Generation of three-dimensional boundary-fitted
curvilinear coordinate system for wing/wing-tip
generausing the elliptic solvers method
p0381 A82-33318
Skin friction lines
p0383 A82-33629
Experimental investigations on the flow in the
impeller of a centrifugal fan
(AIAA PAPER 82-07-37)
p0421 A82-35298
On the vortex flow over delta and double-delta wings
(AIAA PAPER 82-0949)
p0387 A82-37466
A grid interfacing zonal algorithms for
three-dimensional transsonic flows about aircraft
configurations
(AIAA PAPER 82-1017)
p0387 A82-37477
Comparison of experimental and analytical
performance for contoured endwall stations
(AIAA PAPER 82-1286)
p0497 A82-40422
Computation of supersonic flow around
three-dimensional wings
p0506 A82-40938
Determination of the efficiency of a trailing edge
flap in unsteady three-dimensional flow
p0507 A82-40910
Optimal stress surfaces in supersonic
three-dimensional flows
p0547 A82-42722
Higher-order flow angle corrections for
three-dimensional wind tunnel wall interference
p0555 A82-44246
SUBJECT INDEX

THRUST DISTRIBUTION
Tests of a D-vented thrust deflecting nozzle behind a simulated turbofan engine [NASA-CB-3508] p0198 882-17122

THRUST MEASUREMENT
Potential reductions in aircraft operation and maintenance costs by using thrust vectoring [AIAA-CB-16458] p0258 882-10207
Optimization of thrust algorithm for computing system (TCS) for thrust the NASA Highly Maneuverable Aircraft Technology (HiMAT) vehicle's propulsion system [NASA-CB-16312] p0317 882-21198

THRUST POWER
U THRUST
THRUST PROGRAMMING
Flight management computer [SWISS-82-111-110] p0399 882-24842

THRUST REVERSAL
Study of ingestion of exhaust gases with different initial temperature in a reversed turbojet engine p0194 882-11444
Thrust reversing effects on twin-engine aircraft having nonaxisymmetric nozzles [AIAA PAPER 81-2612] p0108 882-16911
Thrust-induced effects on low-speed aerodynamics of fighter aircraft [AIAA PAPER 81-2617] p0155 882-19203
STOL capability impact on advanced tactical aircraft design [AIAA PAPER 81-2617] p0155 882-19206
Thrust reverser induced flow interference on tactical aircraft stability and control [AIAA PAPER 81-1139] p0248 882-37693
Axisymmetric approach and landing thrust reverser impacts on usage and LCC --- life cycle cost p0505 882-40892
Advanced exhaust nozzle technology p0095 882-13078
Static internal performance characteristics of two thrust reverser concepts for axisymmetric nozzles [NASA-TR-2025] p0448 882-26235
Thrust reverser for a long duct fan engine --- for turbofan engines [NASA-CASE-LW-13199-1] p0453 882-26293
Minimum time turn constrained to the vertical plane [AD-A110964] p0456 882-26217
Effect of nozzle and vertical-tail variables on the performance of a 3-surface F-15 model at transonic Mach numbers --- Langley 16 foot transonic tunnel p0586 882-32230

THRUST VECTOR CONTROL
Optimal flight paths for warped, super sonic flight vehicles -- Extension to the case where thrust can be vectored p0005 882-10310
Developments in boundary layer thrust vector control p0100 882-10855
Ground test of a large scale 'D' vented thrust deflecting nozzle [AIAA PAPER 81-2630] p0108 882-16907
NASA V/STOL Propulsion Control Analysis -- Phase I and II program status [AIAA PAPER 81-2632] p0108 882-16908
Thrust-induced effects on low-speed aerodynamics of fighter aircraft [AIAA PAPER 81-2612] p0155 882-19203
Tactical STOL moment balance through innovative configuration technology [AIAA PAPER 81-2615] p0155 882-19204
Application of thrust vectoring for STOL [AIAA PAPER 81-2616] p0155 882-19205
STOL capability impact on advanced tactical aircraft design [AIAA PAPER 81-2617] p0155 882-19206
Design features of a sea-based multipurpose V/STOL, STOL, and STOL aircraft in a support role for the U.S. Navy [AIAA PAPER 81-0150] p0482 882-38443

TILT ROTOR AIRCRAFT
[AIAA PAPER 81-2650] p0157 882-19218
Fighters -- Tomorrow's terminology p0221 882-23368
Performance of a 20-CD nonaxisymmetric exhaust nozzle on a turbojet engine at altitude [AIAA PAPER 82-1137] p0497 882-40420
New nozzle design aimed at F-15, F-16 aircraft [U.S.49 882-43092
Effect of a part span variable inlet guide vane on TF34 fan performance p0088 882-12075
Advanced exhaust nozzle technology p0095 882-13078
A real time Pegasus propulsion system model for VSTOL piloted simulation evaluation [NASA-TR-82720] p100 882-13164
Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing [NASA-TP-1962] p302 882-20156
High pressure bleed for STOL and STOL-V performance: A conceptual examination [AD-A115762] p0590 882-32357

THRUST-WEIGHT RATIO
Enhanced F-15 air-to-ground flight demonstrations [AIAA PAPER 81-2413] p0034 882-18594

THRUSTERS
U BORIC ENGINE
THUNDERSTORMS
Thunderstorms hazards flight research -- Program overview [AIAA PAPER 81-2412] p0053 882-13853
Operational evaluation of thunderstorm penetration test flights during project Storm Hazards '80 p0078 882-19540
Simulation of plume top excitation due to hazardous wind shear [AIAA PAPER 82-0215] p0117 882-17844
Mesoscale convective complexes and general aviation Doppler radar-research and application to aviation flight safety, 1977 -- 1979 p0303 882-20163
NASA research programs responding to workshop recommendations p0311 882-21146
A study of wind shear effects on aircraft operations and safety in Australia [AIAA-TR-83-002] p0522 882-28265

TIG WELDING
U GAS TUNGSTEN ARC WELDING TILT U ATTITUDE (INCLINATION)
TILT Rotor Aircraft Program [NASA-PAPER 81-2501] p0064 882-14386
Ground effect hover characteristics of a large-scale twin tilt-nacelle V/STOL model [AIAA PAPER 81-2609] p0155 882-19201
Analysis of selected VTO concepts for a cavalry transportation mission [AIAA PAPER 81-2655] p0157 882-19220
Flexibility is offered by XV-15 tilt-rotor concept [NASA-TP-83273] p0160 882-19300
Design optimization of rotor systems for tilt-rotor aircraft that fold for shipboard compatibility p0280 882-26399
Advanced helicopter concepts compete p0283 882-26537
XV-15 -- Foretelling things to come p0385 882-33914
JVM, what an opportunity -- Joint Services Advanced Vertical Lift Aircraft Program p0482 882-38623
Aerodynamic characteristics of a large-scale, twin tilt-nacelle V/STOL model [AIAA PAPER 81-0150] p0482 882-38443
Flight dynamics of rotorcraft in steep high-g turns
(AIAA paper 82-1345) p0488 A82-39117
IV-15 progress update
p0554 A82-44468
NASA/BA Advanced Rotorcraft Technology and Tilt
Rotor Workshops. Volume 3: Aerodynamics and
Structures Session
p0262 A82-19172
NASA.TA-84147
The noise of home reduction for departures and
arrival operations of commercial tilt rotor aircraft
p0535 A82-29316
NASA.CH-33780
TILT ROTOR RESEARCH AIRCRAFT PROGRAM
IV-15 Tilt Rotor Fly-by-Wire collective control
Demonstrator development specifications
p0160 A82-15032
NASA/BA Advanced Rotorcraft Technology and Tilt
Rotor Workshop. Volume 7: Tilt Rotor Session
p0360 A82-23244
V/STOL Tilt Rotor Research Aircraft. Volume 1:
General Information, Revision C
p0395 A82-24194
V/STOL Tilt Rotor Research Aircraft. Volume 2:
Ship 1 Instrumentation
p0395 A82-24195
V/STOL Tilt Rotor Research Aircraft. Volume 3:
Ship 2 Instrumentation
p0395 A82-24196
V/STOL Tilt Rotor Research Aircraft. Volume 4:
CFE Technical Data
p0395 A82-24197
TILT ROTOR AIRCRAFT
Development of a preloaded hybrid advanced
composite wing pivot fairing
p0267 A82-27131
Optimization of flight with tilt wings
p0507 A82-40912
TILTING
U ATTITUDE (inclination)
TILTING ROTORS
Advanced technology airfoil development for the
IV-15 tilt-rotor vehicle
p0108 A82-16906
Aeroplane survey of wind tunnel testing of
small and large scale rotors
p0350 A82-22225
TINES INVESTIGATIONS
A VHF homing system with VHF radiotelephony for
area-representative strip-survey flights
carried out as part of combined forest
inventories, with light aircraft carrying 70 m
and 35 m cameras
p0082 A82-15748
TIPS
MT FLIGHT TIME
MT TIPS
MT RESPONSE TIME (computers)
SRL and EPW noise duration coefficients for the
747 and T-38 aircraft
p0042 A82-11860
TIPS DELAY
U TIPS DEPENDENCE
The effects of temperature-time factors on the
metal damage and endurance characteristics of
gas-turbine-engine rotor blades
p0295 A82-30169
System optimization by periodic control
p0611 A82-33402
TIPS DISCRIMINATION
Passive aircraft location
p0547 A82-42791
TIPS DIVISION MULTIPLE ACCESS
Distributed Time Division Multiple Access /DTDMA/
- A distributed signaling technique for advanced
tactical communications
p0067 A82-14719
TRIS distributed TDMA /DTSMA/ terminal
development results with emphasis on relative
navigation performance
p0123 A82-18152
TIPS DIVISION MULTIPLEXING
A modular multiplexed digital voice
intercommunications system
p0068 A82-14721
A design for a 32-channel multiplexer --- for
unmanned aircraft navigation sensors
p0259 A82-18503
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>TOLED TARGETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPF/D8 titanium concepts for structural efficiency for AC</td>
<td>p0308 B82-20585</td>
</tr>
<tr>
<td>SPF/D8 titanium LPC porous panel concept</td>
<td>p0304 B82-20585</td>
</tr>
<tr>
<td>Energy efficient engine shroudless, hollow fan blade technology report</td>
<td>p0317 B82-21196</td>
</tr>
<tr>
<td>TITANIUM ALLOYS</td>
<td></td>
</tr>
<tr>
<td>Sophisticated aircraft structure developments - Combat aeroplanes</td>
<td>p0005 B82-10309</td>
</tr>
<tr>
<td>Welding for low-cost advanced titanium airframe structures</td>
<td>p0222 B82-23757</td>
</tr>
<tr>
<td>Advanced aluminium and titanium structures; Proceedings of the Winter Annual Meeting, Washington, DC, November 15-20, 1981</td>
<td>p0327 B82-20994</td>
</tr>
<tr>
<td>Development of low-cost titanium structures using blended elemental powder metallurgy</td>
<td>p0328 B82-28996</td>
</tr>
<tr>
<td>The technological aspects of titanium application in the TP-144 aircraft structure</td>
<td>p0692 B82-39718</td>
</tr>
<tr>
<td>In-situ radiography of titanium spar tube welds</td>
<td>p0501 B82-40538</td>
</tr>
<tr>
<td>Advantages and limitations in the use of diverse materials for aircraft construction - composite versus metallic materials</td>
<td>p0139 B82-15011</td>
</tr>
<tr>
<td>Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures</td>
<td>p0268 B82-19358</td>
</tr>
<tr>
<td>Process development and evaluation of gas turbine engine components in IN211 -- titanium alloy</td>
<td>p0316 B82-21205</td>
</tr>
<tr>
<td>Review of aerodynamical fatigue investigations in the Netherlands, March 1979 - February 1981</td>
<td>p034 B82-22153</td>
</tr>
<tr>
<td>Powder metallurgical innovations for improved hot section alloys in aero-engine applications</td>
<td>p0357 B82-22358</td>
</tr>
<tr>
<td>Evaluation of cast titanium alloy compressor components - volume 1</td>
<td>p0396 B82-24204</td>
</tr>
<tr>
<td>Mechanical properties of hot isostatic pressed P/M-Titanium for helicopter components</td>
<td>p0410 B82-25383</td>
</tr>
<tr>
<td>International aviation (selected articles)</td>
<td></td>
</tr>
<tr>
<td>International aviation (selected articles)</td>
<td></td>
</tr>
<tr>
<td>Titanium surface treatments for adhesive bonding</td>
<td>p0560 B82-30378</td>
</tr>
<tr>
<td>TOLERANCES (MECHANICS)</td>
<td></td>
</tr>
<tr>
<td>NT IMPACT TOLERANCES</td>
<td></td>
</tr>
<tr>
<td>Analysis and tolerance study of an array antenna for a new generation of secondary radars</td>
<td>p0163 B82-19521</td>
</tr>
<tr>
<td>Computer aided coordinate measuring systems -- in engineering design of helicopter components</td>
<td>p0501 B82-40540</td>
</tr>
<tr>
<td>Damage tolerant design for cold-section turbine engine disks</td>
<td>p0204 B82-17176</td>
</tr>
<tr>
<td>Multistage axial compressor program on tap clearance effects</td>
<td>p0536 B82-29325</td>
</tr>
<tr>
<td>TOLERANCES (PHYSICOL)</td>
<td></td>
</tr>
<tr>
<td>NT HUMAN TOLERANCES</td>
<td></td>
</tr>
<tr>
<td>TOPOGRAPHY</td>
<td></td>
</tr>
<tr>
<td>Determination of material properties by limited scan X-ray tomography</td>
<td>p0596 B82-32682</td>
</tr>
<tr>
<td>Holographic interferometry and tomography at Amos Research Center</td>
<td>p0597 B82-32681</td>
</tr>
<tr>
<td>TORSION</td>
<td></td>
</tr>
<tr>
<td>Wind-tunnel investigation of the effects of blade tip geometry on the interaction of torsional loads and performance for an articulated helicopter rotor</td>
<td>p0097 B82-13107</td>
</tr>
<tr>
<td>Torsional stiffness element based on cobalt-samarium magnets --- for a turn and bank indicator</td>
<td>p0970 B82-27292</td>
</tr>
<tr>
<td>Flap-lag-torsional dynamics of extensional and inextensional rotor blades in hover and in forward flight</td>
<td>p0535 B82-29312</td>
</tr>
<tr>
<td>TORSIONAL STRESS</td>
<td></td>
</tr>
<tr>
<td>The Model 412 multi-bladed rotor system</td>
<td>p0277 B82-26376</td>
</tr>
<tr>
<td>Shape optimization of fiber reinforced composites</td>
<td>p0384 B82-30169</td>
</tr>
<tr>
<td>Flag-lag-torsional dynamics or extensional and inextensional rotor blades in hover and in forward flight</td>
<td>p0506 B82-13891</td>
</tr>
<tr>
<td>Torsional vibrations of a wing carrying a concentrated load /asymptotic behavior/</td>
<td>p0276 B82-18620</td>
</tr>
<tr>
<td>Torsional vibrations of non-uniform rotating blades with attachment flexibility</td>
<td>p0389 B82-33119</td>
</tr>
<tr>
<td>Fundamental torsional frequency of a class of solid wings</td>
<td>p0276 B82-26313</td>
</tr>
<tr>
<td>On the torsional modes of a uniformly tapered solid wing</td>
<td>p0308 B82-33119</td>
</tr>
<tr>
<td>Helicopter propulsion systems. 1: Vibration prevention systems on helicopters. 2: Problem of noise in the cabin</td>
<td>p0209 B82-17222</td>
</tr>
<tr>
<td>TORSUS</td>
<td></td>
</tr>
<tr>
<td>Experimental stress analysis of a thin-walled pressurized torus loaded by contact with a plane</td>
<td>p0276 B82-13891</td>
</tr>
<tr>
<td>Dynamic response of aircraft tires</td>
<td>p0336 B82-30114</td>
</tr>
<tr>
<td>TOUCH</td>
<td></td>
</tr>
<tr>
<td>NT TACTILE DISCRIMINATION</td>
<td></td>
</tr>
<tr>
<td>TOUCH</td>
<td></td>
</tr>
<tr>
<td>Comparative study of flare control laws</td>
<td>p0277 B82-10032</td>
</tr>
<tr>
<td>TOUGHNESS</td>
<td></td>
</tr>
<tr>
<td>Standard tests for toughened resin composites --- for aircraft structures</td>
<td>p0397 B82-24301</td>
</tr>
<tr>
<td>TOUGHERNESS</td>
<td></td>
</tr>
<tr>
<td>Standard tests for toughened resin composites --- for aircraft structures</td>
<td>p0397 B82-24301</td>
</tr>
<tr>
<td>TOUCHE</td>
<td></td>
</tr>
<tr>
<td>Maneuver Stability of a vehicle with a towed body</td>
<td>p0808 B82-39119</td>
</tr>
<tr>
<td>TOUDE TARGETS</td>
<td>U TARGETS</td>
</tr>
</tbody>
</table>
TRANSONIC AEROSPACE

Gateway diversity and competition in international air transportation p0181 A92-21474

Characteristics of a Paris-New York flight on board the Concorde p0543 A92-41700

TRANSONIC AEROSPACE TECHNOLOGY PROGRAM

TRANSONIC COMPRESSORS
Performance analysis of the test results on a two-stage transonic fan
[AIAA PAPER 82-092-12] p0425 A92-35353

A theoretical approach to the stream surface of resolution with supersonic inlet flow in a transonic axial compressor p0033 N82-11025

Aeroelastic considerations in the prediction of uninstalled supersonic flutters in transonic fans p0145 N82-15058

The through flow calculations p0206 N82-17197

Performance of single-stage axial-flow transonic compressor with rotors and stator aspect ratios of 1.62 and 1.78, respectively, and with design pressure ratio of 1.82 [NASA TP-1974] p0256 N82-19222

TRANSONIC FIGHTER
One year flight testing of the Transonic Wing p0283 A92-26543

Commercial transports - Aerodynamic design for cruise performance efficiency p0631 N82-35555

Practical aerodynamic problems - Military aircraft p0631 N82-35556

Extension of FLO codes to transonic flow prediction for fighter configuration p0631 N82-35564

Wing design for supersonic cruise/transonic maneuver aircraft p0517 N82-41021

Relating Mach's mechanics - Bombs away - weapons delivery of fighter aircraft at transonic speed p0556 A92-44467

Supersonic cruise/transonic maneuver wing section development study [AB-110686] p0548 N82-26256

Supercritical maneuvering fighter configuration, wind-tunnel investigation at Mach numbers of 0.60 to 0.75 [NASA-TN-84-513] p0567 N82-31303

TRANSONIC FLOW
Experimental study of subsonic and transonic flows past a wing p0005 A92-10363

Strong matching method for computing transonic viscous flows including wakes and separations - Lifting airfoils p0010 A92-10821

Remarks on the calculation of transonic potential flow by a finite volume method p0082 A92-15035

Computational treatment of transonic canard-wing interactions [AIAA PAPER 82-0161] p0115 A92-17014

A more-accurate transonic computational method for wing-body configurations [AIAA PAPER 82-0162] p0116 A92-17015

Transonic three-dimensional viscous-inviscid interaction for wing-body configuration analysis [AIAA PAPER 82-0163] p0116 A92-17016

Relaxation solution for viscous transonic flow about fighter-type forebodies and afterbodies [AIAA PAPER 82-0252] p0118 A92-17016

Computations of transonic flow over an oscillating airfoil with shock-induced separation [AIAA PAPER 82-0350] p0119 A92-17000

A contribution to the hodograph method for shock-free transonic airfoil sections p0121 A92-18022

Numerical solution of three-dimensional unsteady transonic flow over wings including viscous/inviscid interactions [AIAA PAPER 82-0352] p0164 A92-19797

TRANSONIC FLOW OVER TRANSONIC LINER TECHNOLOGY

Transonic perturbation analysis of wing-fuselage-nacelle-pylon configurations with powered jet exhausts [AIAA PAPER 82-0255] p0184 A92-22077

Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test [AIAA PAPER 82-0548] p0236 A92-24656

Transonic flow past thin wings p0274 A92-25909

Application of a transonic potential flow code to the static aerodynamic analysis of three-dimensional wings [AIAA PAPER 82-0869] p0339 A92-30156

A system for the numerical simulation of sub- and transonic viscous attached flows around wing-body configurations [AIAA PAPER 82-0935] p0733 A92-31922

The equivalent simple body /ESB/ method for transonic wing analysis [AIAA PAPER 82-0936] p0744 A92-31923

A high-frequency transonic small disturbance code for unsteady flows in a cascade [AIAA PAPER 82-0955] p0374 A92-31932

Calculation of the flow-field velocities of a wing-body-stores combination in transonic flow [AIAA PAPER 82-0958] p0374 A92-31936

Evaluation of two analytical methods for the prediction of inlet flow fields in the vicinity of generalized forebodies [AIAA PAPER 82-0959] p0374 A92-31935

Calculations of viscous transonic flow over aerofoils [AIAA PAPER 82-0997] p0375 A92-31957

Design of finite element grids for the computation of the three-dimensional transonic flow around a wing [AIAA PAPER 82-1019] p0375 A92-31972

Prediction of separated asymmetric trailing-edge flows at transonic Mach numbers [AIAA PAPER 82-1021] p0375 A92-31974

Transonic flow past bodies of the type wing-fuselage with allowance for boundary effects p0388 A92-34166

A computational design method for transonic turbomachinery cascades [AIAA PAPER 82-0977] p0425 A92-35348

Transonic design using computational aerodynamics p0431 A92-35560

Application of computational methods to transonic wing-design p0431 A92-35561

A-7 transonic wing designs p0431 A92-35562

Transonic computational experience for advanced tactical aircraft p0431 A92-35563

Extension of FLO codes to transonic flow prediction for fighter configurations p0431 A92-35564

A series of airfoils designed by transonic drag minimization for Gates Learjet aircraft p0432 A92-35565

Applied computational transonnics - Capabilities and limitations p0432 A92-35566

Evaluation of full potential flow methods for the design and analysis of transport wings p0432 A92-35567

A grid interfacing zonal algorithm for three-dimensional transonic flows about aircraft configurations [AIAA PAPER 82-01717] p0437 A92-37477

Numerical solution of a problem concerning transonic flow past a wing-fuselage configuration p0456 A92-39596

A new Transonic Airfoil Design Method and its application to helicopter rotor airfoil design p0498 A92-40507

Calculations of transonic steady state aerodynamic effects for a canard airplane p0504 A92-40882

Viscous transonic airfoil flow simulation p0504 A92-40897

Transonic small disturbance code for body-wing configuration coupled with full potential code for wing alone p0506 A92-40899

An implicit finite-volume method for solving the Euler equations p0506 A92-40899

A-436
Three-dimensional flow studies on a slotted wing root regions of a wing-body combination at transonic and lower supersonic speeds

The principles and methods for shaping the wing-body combination at transonic and lower supersonic speeds

A summary of experimental data on wing characteristics at transonic speeds

Effect of nozzle and vertical-tail variables on design predictions for noise control in the Tactical Munition

The principles and methods for shaping the root regions of a wing-body combination at transonic and lower supersonic speeds

The development of cryogenic wind tunnels and their application to maneuvering aircraft technology

Three-dimensional flow studies on a slotted wind-tunnel wall

Recent sidewall boundary-layer investigations with suction in the Langley 0.3-m Transonic Cryogenic Tunnel

A progress report on the European Transonic Wind Tunnel Project

Aerodynamics of a transport aircraft-type wing-fuselage assembly

The effect of ejector augmentation on test-section flow quality in the Calais 9-ft transonic wind tunnel

Transonic wind tunnel wall interference corrections for three-dimensional models

Development of a self-optimizing flexible tunnel model

Structural modeling of high Reynolds number wind tunnel models

Evaluation of four subcritical response methods for on-line prediction of flutter cassettes in wind-tunnel tests

Static and unsteady pressure measurements on a 50 degree clipped delta wing at $M = 0.5$

The cryogenic wind tunnel for high Reynolds number testing

Status of the national transonic facility

A review of Reynolds number studies conducted in the Langley 0.3-m Transonic Cryogenic Tunnel

Experimental testing at transonic speeds --- wind tunnels

Transonic wind tunnel test of a supersonic missile installation

Subject Index

Aerodynamic behavior of a slender slot in a wind tunnel wall

Estimation of simulation errors in the European Transonic Wind Tunnel (ETW)

Adaptation and first cryogenic operation of T2

Bonding procedure for Teflon seals

Corrections for wall effects in ONERA industrial wind tunnels

Application of laser velocimetry to large industrial wind tunnels

Aeroelasticity matters - Some reflections on two decades of testing in the NASA Langley transonic dynamics tunnel

Construction and performance of NAL two-dimensional transonic wind tunnel

A look inside the Langley 16-foot transonic tunnel: User's guide

An afterbody drag balance --- transonic wind tunnel gages

Longitudinal and lateral static stability and control characteristics of a 1/6-scale model of a remotely piloted research vehicle with a supercritical wing

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurements updated

Cryogenic Technology, part 1 conference proceedings; cryogenic wind-tunnel design and instrumentation

Cryogenic Technology, part 2 conference proceedings; cryogenic wind-tunnel design and instrumentation

NASA Langley laminar flow control airfoil experiment

Cryogenic Technology, part 1 --- conference proceedings; cryogenic wind tunnel design and instrumentation

Cryogenic Technology, part 2 --- conference proceedings; cryogenic wind tunnel design and instrumentation

The development of cryogenic wind tunnels and their application to maneuvering aircraft technology

Wind-Tunnel/Flight Correlation, 1981

Status of the National Transonic Facility

Review of the 1980 Wind-Tunnel/Flight Correlation Panel

Wind-tunnel/Flight-drag correlation

Tunnel-to-tunnel correlation

Problems in correlation caused by propulsion systems

Operating manual holographic interferometry system for 2 x 2 foot transonic wind tunnel

National Transonic Facility (NIF) prototype fan wind tunnel fatigue test

Programs for the transonic wind tunnel data processing installation. Part 8: Programs for processing data on the central site computer

Design basis for a new transonic wind tunnel

A-338
On-board communication for active-control transport aircraft
[AIAA PAPER 81-2171] p0052 A82-13520
Operational evaluation of the new generation of jet transport aircraft
[AIAA PAPER 81-2377] p0059 A82-13942
Progress in aeronautical research and technology applicable to civil air transports
A061 A82-13974
An advanced facility for processing aircraft dynamic test data
[AIAA PAPER 81-2398] p0063 A82-14377
Wing design for light transport aircraft with improved fuel economy
p0065 A82-14916
Enhanced aircraft handling qualities by longitudinal dynamic mode decoupling
p0074 A82-14026
The well tempered transport aircraft engine /The Sir Henry Boyle Memorial Lecture /
PO103 A82-16145
Productivity and safety — reducing transport aircraft operating costs and increasing safety
P0111 A82-17284
Liquid hydrogen — An outstanding alternate fuel for transport aircraft
P0112 A82-17290
Consideration of mechanical, physical, and chemical properties in bearing selection for landing gear of large transport aircraft
[SAFEPAPER 81-LC-28-3] p0126 A82-18412
A mathematical model of a subsonic transport aircraft
P0127 A82-18575
Analysis of selected VTOL concepts for a civil transportation mission
[AIAA PAPER 81-2655] p0157 A82-19220
Aerodynamics of a transport aircraft-type wing-fuselage assembly
[AGEEA, TP NO. 1981-122] p0164 A82-19730
The prospects for liquid hydrogen fueled aircraft
P0166 A82-20137
Digital avionics — Advances in maintenance designs
P0167 A82-20294
Design possibilities for improved fuel efficiency of civil transport aircraft
P0169 A82-20514
Advanced subsonic transport propulsion
P0180 A82-20874
Airbus Industrie — The year of progress
P0180 A82-21189
We have just begun to create efficient transport aircraft
P0180 A82-21373
The outlook for advanced transport aircraft
[AIAA PAPER 81-1215] p0186 A82-22245
Aerodynamic evaluation of winglets for transport aircraft
[AIAA PAPER 81-1215] p0186 A82-22245
Reliability centered maintenance /RCM/
P0223 A82-24001
Fuel-efficient windshields for transport, commuter, and business aircraft
P0226 A82-24304
Airworthiness considerations in the design of commercial transport aircraft
[SAE PAPER 81039] p0232 A82-24396
Airframe surface coatings for drag reduction/weight optimization
[SAE PAPER 81070] p0232 A82-24401
The cargo helicopter — A logistical vehicle
P0240 A82-24717
Advanced electronic displays and their potential in future transport aircraft
P0242 A82-25216
Some thoughts on design optimization of transport helicopters
P0242 A82-25216
Very large vehicles — Technology looking for a need
P0273 A82-25771
Application of a dimensionless criterion of transport efficiency in evaluating aircraft modifications
P033A A82-29837
Very large aircraft — A common response to a rapidly changing, global environment
[AIAA PAPER 82-0795] p0375 A82-31979
The potential of large aircraft
[AIAA PAPER 82-0804] p0376 A82-31980
Multibody transport concept
[AIAA PAPER 82-0810] p0376 A82-31983
System study of application of composite materials for future transport aircraft
[AIAA PAPER 82-0812] p0376 A82-31985
Commercial transport developments for the 1990's
P0396 A82-34109
Transport engine control design
[AIAA PAPER 82-1076] p0416 A82-34956
Commercial transports — Aerodynamic design for cruise performance efficiency
P0431 A82-35555
Investigation of the unsteady airloads on a transport aircraft type airfoil with two interchangeable oscillating trailing edge flaps, at transonic speed and high Reynolds numbers
P0360 A82-40942
A concept for 40-guardance of transport aircraft as the TMA — Terminal Maneuvering Area
P0360 A82-40942
Experimental and theoretical studies of three-dimensional turbulent boundary layers on an openface of a typical transport airplane
P0511 A82-40955
Requirements and trends in fuel consumption in transport mission with aircraft and surface vehicles
P0511 A82-40956
Aerodynamic concepts for fuel-efficient transport aircraft
P0511 A82-40957
Progress at Douglas on laminar flow control applied to commercial transport aircraft
P0511 A82-40958
A crack growth model under spectrum loading
P0511 A82-40961
Application of composite materials and new design concepts for future transport aircraft
P0515 A82-40994
Aerodynamic research applications at Boeing
P0515 A82-41000
Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods
P0517 A82-41022
Aircraft R&D in Europe — A perspective view
P0546 A82-42564
Theoretical investigation of the influence of spoiler dynamics on the handling qualities of an aircraft with direct lift control
[SAP-A-75-601] p0527 A82-10036
Propulsion study for Small Transport Aircraft Technology (STAT)
[NASA-CR-165499] p0527 A82-10037
Propulsion study for Small Transport Aircraft Technology (STAT), Appendix B
[NASA-CR-165499-APP-B] p0527 A82-10038
Control law design for transport aircraft flight tasks
P0539 A82-11080
In-service inspection methods for graphite-epoxy structures on commercial transport aircraft
[NASA-CR-165746] p0565 A82-12142
Electronic flight deck displays for military transport aircraft
P0592 A82-13050
Aerodynamics of Power Plant Installation
[AGARD-CP-301] p0593 A82-13065
Aerodynamic aspects of a high bypass ratio engine
[DE81-028406] p0593 A82-13065
Installation on a fuselage afterbody
P0596 A82-13993
Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: AFT C.G. simulation and analysis
[NASA-CR-159908] p0595 A82-15077
Symposium on commercial-aviation energy-conservation strategies
[DBH1-029406] p0595 A82-15077
Systems study of transport aircraft incorporating advanced aluminum alloys
[NASA-CR-165820] p0201 A82-17153
Laminar airfoils for transport aircraft
[ESA-TT-681] p0027 A82-17153
C-5A sustainer airfoil operational utility evaluation. Phase 2: Operation on unpaved soil surfaces following rainfall
[AD-A10857] p0255 A82-18208
Trends in the development of subsonic transport aircraft with special consideration of aerodynamics (NASA-TT-705) p0255 882-18234
Transport aircraft cockpit standardization (Federal Aviation regulations part 25) (AD-A108926) p0264 882-19207
Simulation study of vortex encounters by a twin-engine, commercial, jet transport airplane (NASA-TP-1966) p0267 882-19225
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 1: Executive summary (AD-A110035) p0310 882-21180
Transport aircraft accident dynamics (NASA-CR-165850) p0350 882-22227
Fuel efficiency engines for large transport aircraft [PB82-90082] p0355 882-22276
The 737 graphite composite flight spoiler flight service evaluation (NASA-CR-165826) p0356 882-22314
Commercial jet transport crashworthiness (NASA-CR-165849) p0360 882-23207
Definition of display/control requirements for annular transport night/ adverse weather capability (NASA-CR-165851) p0365 882-23217
Transport aircraft crash dynamics (NASA-CR-165851) p0394 882-24186
Study of advanced propulsion systems for Small Transport Aircraft Technology (STAT) program (NASA-CR-165773) p0396 882-26020
Cost and fuel consumption per nautical mile for two engine jet transports using OPTIM and TRACEN (NASA-CR-165851) p0407 882-25239
Aerodynamics/AICE: Aircraft energy efficiency (NASA-FACTS-94-0-61) p0407 882-25241
Guidance and control/AICE (NASA-FACTS-95-0-61) p0409 882-25261
An analytical study for turbulence responses, including horizontal tail loads, of aerodynamically configured jet transport with relaxed static stability (NASA-CR-165851) p0455 882-26313
Characteristics of future aircraft impacting aircraft and airport compatibility (NASA-TM-84976) p0463 882-27233
Cabin safety in large transport aircraft (NASA-CR-149297) p0464 882-27284
Analytical and simulator study of advanced transport (NASA-CR-23572) p0526 882-28298
Fireworthiness of transport aircraft interior systems (NASA-CR-165774-VOL-1) p0533 882-29284
Fireworthiness of transport aircraft interior systems (NASA-CR-165774-VOL-2) p0536 882-29511
Aerodynamics of a transport aircraft type wing-body model (NASA-TR-76078) p0557 882-30287
Integrated application of active controls (IAC) technology to an advanced subsonic transport project. Initial ACT configuration design study (NASA-CR-33068) p0589 882-32549
Integrated application of active controls (IAC) technology to an advanced subsonic transport project. Initial ACT configuration design study (NASA-CR-159249) p0593 882-32380
Integrated application of active controls (IAC) technology to an advanced subsonic transport project. Conventional baseline configuration study (NASA-CR-159249) p0593 882-32380
Environmental exposure effects on composite materials for commercial aircraft (NASA-CR-165981) p0594 882-32421
Scenario of economic development within the European Community up to the year 2000 (NASA-TP-730) p0603 882-33206
TRANSPORT COEFFICIENTS & TRANSPORT PROPERTIES
TRANSPORT PROPERTIES
NT ELECTRICAL RESISTIVITY
NT THERMAL CONDUCTIVITY
NT VISCOSITY
Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CPA tunnel (NASA-TM-83220) p0146 882-15359
TRANSPORT THEORY
NT MAXIMUM FLOW THEORIE
TRANSPORT VEHICLES
Use of CGHP in transport --- Carbon and Glass Hybrid Reinforced Plastics p0435 882-37061
TRANSPORTATION
NT AIR TRANSPORTATION
NT MARINE TRANSPORTATION
NT RAIL TRANSPORTATION
NT SPACE TRANSPORTATION
NT SPACE TRANSPORTATION SYSTEM
NT URBAN TRANSPORTATION
Transportation noise, its impact, planning and regulation ([S-258]) p0470 882-27664
Maximizing South Carolina's aviation resources: Identifying potentially profitable commercial airline routes, volume 2 (PB82-139535) p0532 882-29277
TRANSPORTATION ENERGY
Technological innovation for success - Liquid hydrogen propulsion p0107 882-16734
Requirements and trends in fuel consumption in transport mission with aircraft and surface vehicles p0511 882-40956
TRANSPORTATION NETWORKS
Beyond 2000 - The airlift challenge ahead (AIAA PAPER 82-0915) p0377 882-31988
Airline evaluation in air network planning p0380 882-33125
TRANSVERSE WAVES
Transverse electric waves for VLF/LF communication between aircraft (AD-A115834) p0596 882-32582
TRIPODIAL TAIL SURFACES
Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.69, 2.36, and 3.76. Volume 1: Tripo- dial tail (NASA-TR-60097) p0908 882-13110
TRIPODIAL WINGS
Experimental study of subsonic and transonic flows past a wing p0605 882-10363
An experimental investigation of leading-edge spanwise blowing p0518 882-40988
Unsteady pressure measurements at stall and buffetting (DFVLR-RTT-79-09) p0364 882-23198
TRAVELLING WAVES
A practical approach to systems mode analysis --- for disk-blade-skirt assemblies (NASA PAPER 81-DST-130) p0162 882-19340
Antenna (selected articles) (US-108174) p0269 882-19498
Assessment of aircraft capacitive carcass medium wave antennas according to their efficiency p0269 882-19453
THREATS
Air threat temperatures during antiskid braking p0481
The subject index:

The protection of gas turbine blades - A platinum aluminide diffusion coating p0063 A82-21-1364
The operational characteristics of turboreactors, giving particular attention to the cooled high-pressure turbine p0065 A82-18-1414
A method for predicting the lifetime of gas turbine blades p0106 A82-16-1692
Damage of turbine blades due to interaction with fuel recombination products p0127 A82-16-1679
Effect of the blade type on the aerodynamic damping of blade vibrations with allowance for the profile curvature p0127 A82-18-1848
Transient two-dimensional temperature distributions in a cooled turbine blade p0169 A82-20-1883
Impingement cooling of concave surfaces of turbine airfoils p0149 A82-18-1894
Aeroelastic characteristics of a cascade of cooled blades in subsonic and supersonic flows [AIAA PAPER 81-DST-1125] p0161 A82-19-1337
On the formulation of coupled/uncoupled dynamics analyses of blade-disc assemblies [AIAA PAPER 81-DST-126] p0162 A82-19-1340
Optimal shape design of turbine blades [AIAA PAPER 81-DST-128] p0162 A82-19-1342
Investigation of vibration of shrouded turbine blades [AIAA PAPER 81-DST-129] p0162 A82-19-1343
Measurement of the influence of flow distortions on the blade vibration amplitude in an air turbine [AIAA PAPER 81-DST-125] p0162 A82-19-1348
Endwall boundary layer flows and losses in an axial turbine stage [AIAA PAPER 81-DST-135] p0169 A82-19-1379
Improved plasma sprayed TkAl coatings for aircraft gas turbine applications p0176 A82-20-20742
Analysis of the temperature field of a turbine engine under conjugated boundary conditions p0295 A82-20-8180
Investigation of heat transfer in the vicinity of the leading and trailing edges of a cooled nozzle blade of a low-consuming gas turbine [AIAA PAPER 81-DST-128] p0295 A82-20-8180
The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades p0295 A82-20-8192
An experimental investigation of interfacial temperatures in blade-steel material rubbing of aircraft compressors [AIAA PAPER 82-0890] p0373 A82-20-31893
Design, fabrication and testing of an electrical analogue for heat transfer to coated turbine blade [AIAA PAPER 81-DST-128] p0382 A82-23-3520
Darrieus rotor aerodynamics [AIAA PAPER 82-0789] p0384 A82-23-3370
Mechanical and metallurgical considerations in extending the life of turbine blades [AIAA PAPER 82-0890] p0384 A82-23-3370
Air cooling of gas turbine blades p0390 A82-23-34700
A study of the vibration loading of the turbine blades of an aircraft gas-turbine engine with dry-friction dampers [AIAA PAPER 82-0789] p0391 A82-23-3480
Energy efficient engine /83/ technology status [AIAA PAPER 82-0515] p0415 A82-23-3780
Turbojet blade nonlinear structural and life analysis [AIAA PAPER 82-0516] p0415 A82-23-3780
Control of gas turbine power transients for improved turbine airflow durability [AIAA PAPER 82-0517] p0418 A82-23-35047
A comprehensive method for preliminary design of high pressure turbine optimization of axial gas turbine stages [AIAA PAPER 82-0518] p0419 A82-23-35091
Secondary flow losses and losses in axial flow turbines [AIAA PAPER 82-0519] p0420 A82-23-3522
Secondary flow effects and mixing of the wake behind a turbine stator [AIAA PAPER 82-0520] p0422 A82-23-3530

The protección de las placas de turbinas de gas - una capa de aluminio platinado p0063 A82-21-1934
Las características operacionales de los turboreactores, dando particular atención a las turbinas de alta presión de gas p0065 A82-18-1414
Un método para predecir la vida útil de las placas de turbinas de gas p0106 A82-16-1692
El daño de las placas de turbinas debido a la interacción con los productos de combustión p0127 A82-16-1679
El efecto del tipo de placa en el amortiguamiento aerodinámico de las vibraciones de las placas con ajuste para la curvatura de la superficie p0127 A82-18-1848
Las distribuciones de temperatura transitorias en una placa de turbinas de gas p0169 A82-20-1883
El mejoramiento de las superficies concavas de las aeronaves de turbinas de gas p0149 A82-18-1894
Las características aeroelásticas de un cascada de placas de turbinas en flujo subsonico y supersónico [AIAA PAPER 81-DST-1125] p0161 A82-19-1337
La formulación de la dinámica asociada a las placas de turbina y los discos [AIAA PAPER 81-DST-126] p0162 A82-19-1340
El dise o óptimo de las placas de turbinas de gas [AIAA PAPER 81-DST-128] p0162 A82-19-1342
El estudio de la vibración de las placas de turbinas [AIAA PAPER 81-DST-129] p0162 A82-19-1343
La medición de la influencia de las distorsiones de flujo sobre la amplitud de las vibraciones de las placas en un turbina de gas [AIAA PAPER 81-DST-125] p0162 A82-19-1348
La capa de turbina de la corteza de la aeronave axial [AIAA PAPER 81-DST-135] p0169 A82-19-1379
El mejoramiento de las superficies a través de las placas de turbina de gas [AIAA PAPER 82-0890] p0373 A82-20-31893
El diseño, la fabricación y la prueba de un modelo eléctrico para el calor de transferencia a las placas de turbina [AIAA PAPER 81-DST-128] p0382 A82-23-3520
La aerodinámica del rotor Darrieus [AIAA PAPER 82-0789] p0384 A82-23-3370
Las consideraciones mecánicas y metálicas en la extensión de la vida útil de las placas de turbinas [AIAA PAPER 82-0890] p0384 A82-23-3370
El enfriamiento del aire de las placas de turbinas [AIAA PAPER 82-0890] p0390 A82-23-34700
El estudio del impacto de la vibración en las placas de turbina de un aeroplano de turbinas de gas con amortiguadores de fricción seca [AIAA PAPER 82-0789] p0391 A82-23-3480
El rendimiento de motor de gas-turbina /83/ tecnología estado [AIAA PAPER 82-0515] p0415 A82-23-3780
La placa de turbina de gas no lineal estructural y vida de vida [AIAA PAPER 82-0516] p0415 A82-23-3780
El control de la potencia de turbina de gas para mejorar la durabilidad de la corriente de turbina de gas [AIAA PAPER 82-0517] p0418 A82-23-35047
Un método integral para el diseño preliminar de la optimización de la etapa de turbina de gas axial [AIAA PAPER 82-0518] p0419 A82-23-35091
Las pérdidas de flujo secundario y las pérdidas en la capa de turbina axial [AIAA PAPER 82-0519] p0420 A82-23-3522
El efecto de las corrientes secundarias y la mezcla en el remolino del turbina [AIAA PAPER 82-0520] p0422 A82-23-3530
The effect of coolant flow on the efficiency of a transonic HP turbine profile suitable for a small engine [NASA PAPER 82-GT-163] p022 A82-35315

The use of performance-monitoring to prevent compressor and turbine blade failures [NASA PAPER 82-GT-166] p022 A82-35316

A two-dimensional boundary-layer program for turbine airfoil heat transfer calculations [NASA PAPER 82-GT-93] p042 A82-35336

Effect of crossflows on the discharge coefficient of film cooling holes [NASA PAPER 82-GT-147] A82-35371

Dry friction damping mechanisms in engine blades [NASA PAPER 82-GT-162] p042 A82-35383

Measurements of heat transfer coefficients on gas turbine components. I - Description, analysis, and experimental verification of a technique for use in hostile environments [NASA PAPER 82-GT-126] p0430 A82-35568

The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine [NASA PAPER 82-GT-222] p042 A82-35509

Structural dynamics of shroudless, hollow, fan blades with composite in-lays [NASA PAPER 82-GT-204] p0430 A82-35506

The effect of erosion wear on the vibration characteristics of axial-turbine blades [NASA PAPER 82-GT-126] p043 A82-35574

Aerodynamic performance of high-turndown core turbine vane in a two-dimensional cascade [NASA PAPER 82-1268] p043 A82-37716

Comparison of HP turbine 'deep blade design' effects in turbofan engine gas generators with different bearing structure configurations [NASA PAPER 82-GT-184] p0427 A82-35396

Acoustic emission inspection of aircraft engine turbine blades for intergrular corrosion [NASA PAPER 82-GT-222] p042 A82-35494

Mathematical models of rotor strength and optimization in computer-aided design [NASA PAPER 82-GT-222] p042 A82-35462


A new method of cooling turbine vanes [NASA-PAPBB 82-GT-204] p043 A82-11027


Stability and flutter analysis of turbine blades at low speed [NASA-TM-82-2740] p042 A82-15050

On the numerical analysis of stall flutter in turbine cascades [NASA-TM-82-2740] p042 A82-15054

Seventh European Rotocraft and Powered Lift Aircraft Forum [NASA-TM-82-2740] p0205 A82-16199

Fluctuating pressures on fan blades of a turboshaft engine: Static and wind-tunnel investigations [NASA-TM-82-2740] p0205 A82-21037


Repair and regeneration of turbine blades, vanes and discs [NASA-CR-165565] p0305 A82-22185

Laser anemometer measurements in an annular cascade of core turbine vanes and comparison with theory [NASA-CR-165565] p0047 A82-26224

Static internal performance characteristics of two thrust reverser concepts for axial-symmetric nozzles [NASA-CR-165565] p0048 A82-26235

Towing of wind turbines with blade cyclic-pitch variation [NASA-CR-165565] p0094 A82-26282

TURBINE ENGINES

NT J-45 ENGINE
NT JET ENGINES
NT PULSEJET ENGINES
NT J-85 ENGINE
NT JET ENGINE
NT SUPERSONIC COMBUSTION JET ENGINES
NT T-56 ENGINE
NT TURBOPROP ENGINES
NT TURBOPROP ENGINES

Superalloy turbine components - Which is the superior manufacturing process, am-EP, HIP plus laser forming, or 'gatorizing' of extrusion consolidated billet [NASA-CR-165565] p0021 A82-12497

Superalloy powder engine components; controls employed to assure high quality hardware [NASA-CR-165565] p0021 A82-12499


The role of modern control theory in the design of controls for aircraft turbine engines [NASA-CR-165565] p0282 A82-26526

Bird impact analysis package for turbine engine fan blades [NASA-CR-165565] p0339 A82-30162

Demonstration of ceramic hot-section static components in a radial flow turbine [NASA-CR-165565] p0419 A82-35102

Ceramic turbine housings [NASA-CR-165565] p0430 A82-35463

Evaluation of a multivariable control design on a variable cycle engine simulation [NASA-CR-165565] p0438 A82-37682

Development of multivariable controllers for aircraft turbine engines [NASA-CR-165565] p0040 A82-11087

Corrosion inhibiting engine oils [NASA-CR-165565] p0135 A82-14099

Instructive-geographic flowpath planning for turbine engines [NASA-CR-165565] p0162 A82-15041


Development test programs adapted to helicopter engines [NASA-CR-165565] p0207 A82-17205

The influence of new turbine technologies on their components [NASA-CR-165565] p0207 A82-17210

Helicopter air inlets [NASA-CR-165565] p0207 A82-17217

Cooled variable-area radial turbine technology program [NASA-CR-165565] p0266 A82-19217

A retirement-for-cause study of an engine turbine disk [NASA-CR-165565] p0305 A82-20184

Dualchannel fuel control program, phase 2 [NASA-CR-165565] p0305 A82-20185

The role of modern control theory in the design of controls for aircraft turbine engines [NASA-CR-165565] p0354 A82-22262

Advanced general aviation engine/airframe integration study [NASA-CR-165565] p0455 A82-26308

Turbine engine lubricant reclamation [NASA-CR-165565] p0455 A82-26312

Bird impact analysis package for turbine engine fan blades [NASA-CR-165565] p0460 A82-26701


Flight object impact design criteria, volume 3 [NASA-CR-165565] p0473 A82-27313

Foreign object impact design criteria, volume 2 [NASA-CR-165565] p0473 A82-27314

An exploratory research and development program leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 1: Preliminary process analyses [AD-8112681] p0527 A82-29462
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 2: Process variable analyses and laboratory sample production [AD-8112682] p0528 A82-29463
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 3: Production of specification of JP-4 fuel from geokinetics shale oil [AD-8112683] p0528 A82-29464
Aviation fuels—future outlook and impact on aircraft fire threat p0532 A82-29282
Remote sensing of turbine engine gases [AD-8115404] p0559 A82-30310
TURBINE EXHAUST NOZZLES
Infrared emissions from fans with high aspect ratio nozzles p1013 A82-16092
Demonstration of ceramic hot-section static components in a radial flow turbine [ASME PAPEB 82-GT-184] p0427 A82-35392
Prediction of off-design performance of turbo-shaft engines a simplified method p0426 A82-18132
TURBINE WHEELS
Optima journal bearing parameters for maximum rotor balancing response in synchronous whirl [ASME PAPEB 81-DT-55] p0161 A82-19314
Natural frequencies of rotating bladed discs using clamped-free blade nodes [ASME PAPEB 81-DT-124] p0162 A82-19338
An investigation of dual mode phenomena in a mistuned bladed-disc [ASME PAPEB 81-DT-133] p0162 A82-19347
Dispersion and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine-engine disk alloy p1012 A82-21636
Sliced disc design—a composite crom concept for a turbo engine axial compressor p0515 A82-40995
An examination of the dynamics of rotary machinesSaint—French thesis p0552 A82-43724
TURBINES
WT AXIAL FLOW TURBINES
WT GAS TURBINES
WT SHROUDED TURBINES
WT STEAM TURBINES
WT SUPERSONIC TURBINES
WT TWO STAGE TURBINES
WT WIND TURBINES
Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines p0955 A82-13087
Roll up model for rotor wake vortices, part 5 [ASME-92-194-8] p0156 A82-17127
User's manual for the vertical axis wing turbine code VORTZ [DE82-000796] p0461 A82-26828
CF6 jet engine performance improvements—High pressure turbine active clearance control [NASA-CR-165556] p0526 A82-28297
Cooled variable nozzle radial turbine for rotor craft applications [NASA-CR-165597] p0536 A82-29323
The CF6 jet engine performance improvements—Low pressure turbine active clearance control [NASA-CR-165597] p0610 A82-33393
TURBOCHARGERS
# SUPERCHARGERS
# TURBOCOMPRESSORS
TURBOCOMPRESSORS
Wind tunnel tests on airfoils in tandem cascade [AD-8110605] p0012 A82-10987
Design procedures for compressor blades [AIAA PAPER 82-0196] p0109 A82-17135
Water injection into jet engine axial compressors [AIAA PAPER 82-0196] p0117 A82-17836
Four pad tilting pad bearing design and application for multistage axial compressors [ASME PAPEB 81-GT-121] p0126 A82-18429
Effect of wakes of upstream stator blade on the rotor of an axial flow compressor p0276 A82-26208
The excitation of compressor/duct systems [AD-82-152] p0327 A82-28993
An experimental investigation of interfacial temperatures in blade-material real rubbing of aircraft compressors [AIAA PAPER 82-0739] p0373 A82-31897
Test facility and data handling system for the development of axial compressors [ASME PAPEB 82-GT-74] p0423 A82-35322
Comprehensive analysis of an axial compressor test with adjustable guide vanes [ASME PAPEB 82-GT-81] p0423 A82-35327
Influence of casing treatment on the operating range of axial compressors [ASME PAPEB 82-GT-103] p0424 A82-35340
Effect of the rear stage casing treatment on the overall performance of a multistage axial-flow compressor [ASME PAPEB 82-GT-110] p0424 A82-35344
An inviscid-viscous interaction treatment to predict the blade-to-blade performance of axial compressors with leading edge normal shock waves [ASME PAPEB 82-GT-135] p0425 A82-35363
The use of optimization techniques to design nonrotating diffusion compressor blading [ASME PAPEB 82-GT-149] p0426 A82-35373
The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine [ASME PAPEB 82-GT-222] p0426 A82-35409
The calculation of deviation angle in axial-flow compressor cascades [ASME PAPEB 82-GT-230] p0428 A82-35412
Progress in the development of energy efficient engine components [ASME PAPEB 82-GT-275] p0429 A82-35450
The effect of intake flow disturbances on AP0 compressor blade high cycle fatigue in the Airbus A300 [ASME PAPEB 82-GT-275] p0429 A82-35490
Sliced disc design—a composite crom concept for a turbo engine axial compressor p0515 A82-40995
An experimental examination of compressor blade fin afterlife [NASA TP NO. 1982-31] p0547 A82-62808
Numerical calculation of the flow in compressor and turbine cascades — Saint—French thesis p0570 A82-45202
An aerodynamic design method for transonic axial flow compressor stage [ASME PAPEB 82-GT-1094] p0532 A82-10944
Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure [ASME PAPEB 82-GT-1094] p0532 A82-11006
An experimental investigation of the rotating stall, surge and wake behind the rotor for a single stage axial compressor [ASME PAPEB 82-GT-1094] p0533 A82-11008
A theoretical analysis of the stream surface of revolution with super sonic inlet flow in a transonic axial compressor [ASME PAPEB 82-GT-1102] p0533 A82-11025
Three dimensional flow investigation with a method of characteristic in the inlet region and the blade-to-blade channels of super sonic axial compressors (ESA—TT-637) p0088 A82-12078
The use of optimization techniques to design controlled diffusion compressor blading [NASA—TM—82763] p0144 A82-14094
Optimization of compressor vanes and bleed settings [NASA—TM—82676] p0144 A82-14097
Computer program for aerodynamic and blading design of multistage axial-flow compressors [NASA—TP—1946] p0144 A82-15039
Practical experience with a noncontact blade vibration measuring system in industrial turbocompressors / vibration node identification [NASA—TP—1946] p0144 A82-15065
A computer program for variable-geometry single-stage axial compressor test data analysis (AD-A106676) p0191 882-16086

Through flow calculations in axial turbomachines [NASA CR-175] p0204 882-17178

Survey on diffusion factors and profile losses p0204 882-17176

End-wall boundary layer calculation methods p0204 882-17178

Correlation for secondary flows and clearance effects p0205 882-17179

Effects of Reynolds number and turbulence level on axial cascade performance p0205 882-17190

Axial compressor stall and surge p0205 882-17194

Single stage transonic compressor and equivalent plane cascade p0206 882-17196

BSC/Saizer. 4 stage transonic compressor p0206 882-17197

Results of calculations p0206 882-17198

The through flow calculations p0206 882-17199

Axial-flow turbomachinery through flow calculation methods p0206 882-17201

Blade-to-blade computations and boundary layer corrections in axial compressors and turbines through flow calculations in axial turbomachines p0205 882-17202

Analytical investigation of nonrecoverable stall p0317 882-21195

Allowing for the wall boundary layer in a stage of an axial compressor p0319 882-21209

The mechanical testing of compressor. and turbines for aircraft gas turbine engines -- Rolls Royce engines p0319 882-21211

Encounters with surge: Some experiences of development of axial compressors for aero gas turbines [PWN-90071] p0355 882-22274

Computer modeling of fan-exit-splitter spacing effects on F100 response to distortion [NASA CR-167879] p0369 882-23266

STAG3K: A computer code for predicting multistage axial flow compressor performance by a streamline stage stacking method [NASA TP-2020] p0408 882-25250

Three dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage [NASA CR-469007] p0408 882-25252

Aerodynamically induced vibration [AD-A110463] p0455 882-26306

Core compressor exit stage study, volume 6 p0472 882-27310

Advanced stratified charge rotary aircraft engine design study [NASA CR-165553] p0478 882-27743

Multistage axial compressor program on tap -- clearance effects [AD-A107445] p0536 882-29125

Water ingestion into axial flow compressors. Part 3: Experimental results and discussion [AD-A114840] p0537 882-29326

Effect of water on axial flow compressors. Part 2: Computational program [AD-A114831] p0537 882-29327

Aerodynamics of advanced axial-flow turbomachinery [AD-A114911] p0537 882-29328

Computation of three dimensional unsteady nonuniform flow in the blade-free annular channel of a turbomachine -- military aircraft, turbocompressors (OSDA-MA-1982-2) p0592 882-32372

THUMBEN DESK 53 ENGINE

NT BRISTOL-SIDDELEY BS 53 ENGINE

NT TP-34 ENGINE

Rotor wake characteristics relevant to rotor-stator interaction noise generation [AIAA PAPER 81-2031] p0008 882-10456

Application of numerical modeling to gas turbine combustor development problems p0019 882-12118

Performance assessment of an advanced reheated turbo fan engine [AIAA PAPER 81-2447] p0055 882-13897

The all composite Lear Fan 2100 p0077 882-19736

Infrared emissions from turbosfans with high aspect ratio nozzles p0103 882-16092

An iterative finite element-integral technique for predicting sound radiation from turbofan inlets in steady flight [AIAA PAPER 80-1246] p0115 882-17796

3037 - Pratt & Whitney tests new turbofan engine p0126 882-18347

Comparison of two parallel/series flow turbofan propulsion concepts for supersonic TF307 [AIAA PAPER 81-2637] p0156 882-19214

Energy management in military combat aircraft p0163 882-20515

Advanced subsonic transport propulsion [AIAA PAPER 81-0011] p0180 882-20874

ALF502 - Plugging the turbofan gap p0206 882-21243

Denuz technology for improved performance retention in turbofan engines [SCE PAPER 811055] p0231 882-24392

Management of powerplant maintenance and restoration programs for fuel conservation [SCE PAPER 811052] p0231 882-24394

Operating flight loads and their effect on engine performance [SCE PAPER 811071] p0233 882-24005

Performance retention features of the TF307 [SCE PAPER 811054] p0233 882-24009

An experimental and analytical study of mixing flow of turbofan engine exhaust through circular and 2-dimensional mixer/nozzle [AIAA PAPER 82-0130] p0250 882-27087

Measurement of aerodynamic work during fan flutter p0250 882-29977

Selection of a starting system for a low cost single engine fighter aircraft [AIAA PAPER 82-1043] p0415 882-34977

Efficiency engine /83/ technology status [AIAA PAPER 82-1052] p0415 882-34980

Transport engine control design [SCE PAPER 82-1076] p0410 882-36956

Small turbine engine augmentor design methodology [AIAA PAPER 82-1179] p0417 882-35044

Individual bypass throttling in fighter engines [AIAA PAPER 82-1185] p0419 882-35100

Smoke reduction in F94-710 turbofan engines by an airblast combustor [AIAA PAPER 82-1249] p0420 882-35290

Experimental investigations on the flow in the impeller of a centrifugal fan [AIAA PAPER 82-1471] p0421 882-35298

Application of high bypass turbofan computer simulation to flight and test data processing [AIAA PAPER 82-1471] p0426 882-35364

BC and CO emission abatement via selective fuel injection [AIAA PAPER 82-17] p0426 882-35390
Performance improvement features of General Electric turbofan engines
[ASME PAPER 82-CP-270] - p0429 A82-35494

Flight evaluation of a digital electronic engine control system in an F-15 airplane
[ASME PAPER 82-CP-100] - p0438 A82-37683

Experimental performance evaluation of 'ventilated mixers' - a new mixer concept for high bypass ratio fans
[ASIAA PAPER 82-1136] - p0439 A82-37695

Optimized 10 ton class commercial aircraft engine
[ASIAA PAPER 82-400] - p0400 A82-40000

Recent advances in the performance of high bypass ratio fans
[ASIAA PAPER 82-40091] - p0505 A82-40091

Third generation turbo fans
[ASIAA PAPER 82-40296] - p0511 A82-40296

Comparison of BP turbine 'deep blade design' effects in turbofan engine gas generators with different bearing structure configurations
[ASIAA PAPER 82-11345] - p0000 A82-11345

Sensor failure detection system -- for the F100 turbofan engine
[ASIAA PAPER 82-156515] - p0100 A82-156515

Tests of a D vented thrust deflecting nozzle behind a shrouded turbofan engine
[ASIAA PAPER 82-156558] - p0198 A82-156558

CF6 jet engine performance improvement: High pressure turbine roundness
[ASIAA PAPER 82-156555] - p0203 A82-156555

Damage tolerant design for cold-section turbine engine disc exit
[AD-A107663] - p0204 A82-107663

A study to define the research and technology requirements for advanced turbo/propfan transport aircraft
[ASIAA PAPER 82-156515] - p0254 A82-156515

Effects of fan inlet temperature disturbances on the stability of a turboshaft engine
[NASAR-TM-82695] - p0256 A82-82695

Aerodynamic noise generated by jet wing/ flap interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using F10710 turbofan engine

Tests and analysis of a vented D thrust deflecting nozzle on a turbofan engine -- conducted at the outdoor aerodynamic research facility of the Ames Research Center
[ASIAA PAPER 82-166279] - p0301 A82-166279

Identification of multivariable high performance turbofan engine dynamics from closed loop data
[ASIAA PAPER 82-166279] - p0307 A82-166279

Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations
[ASIAA PAPER 82-1976] - p0209 A82-1976

V/STOL Fan design transition section model test -- in the Lewis Research Center 10-by-10 foot wind tunnel
[ASIAA PAPER 82-166587] - p0312 A82-166587

Energy efficient engine shroudless, hollow fan blade technology report
[ASIAA PAPER 82-166586] - p0317 A82-166586

Developments to improve the noise and combustion emissions on the Fokker F28 aircraft and its Rolls-Royce RB185-555 engines. Section 1: Development of the new internal 10-lobe mixer
[PH-90061] - p0318 A82-90061

The Rolls royce role in aircraft noise reduction -- jet engines, acoustic lining
[PH-90069] - p0319 A82-90069

Simulation of turbofan engine models in the Windtunnel low speed wind tunnel -- gas supply control
[BAB-B74R-1074-4-9] - p0319 A82-1074-4-9

Energy efficient engine exhaust axler mixer technology
[ASIAA PAPER 82-165659] - p0354 A82-165659

Computer modeling of fan-exit-splitter spacing effects on F100 response to distortion
[ASIAA PAPER 82-166789] - p0369 A82-166789

Alternatives for jet engine control
[ASIAA PAPER 82-168894] - p0369 A82-168894

Propulsion/ACEE

Exhaust emissions survey of a turbofan engine for flame holder swirl type augmenters at simulated altitude flight conditions
[NASA-TM-826278] - p0400 A82-23245

Thrust reverser for a low duct fan engine -- for turbofan engines

Effect on fuel efficiency of parameter variations in the cost function for multivariable control of a turbofan engine
[AD-A110614] - p0454 A82-42631

Acoustic properties of turbofan inlets
[ASIAA PAPER 82-169016] - p0462 A82-27900

Performance deterioration due to acceptance testing and flight loads: JT9D jet engine diagnostic program
[ASIAA PAPER 82-165572] - p0472 A82-27309

Forward velocity effects on fan noise and the suppression characteristics of suction inlets as measured in the NASA Ames 40 by 80 foot wind tunnel
[ASIAA-CB-152328] - p0504 A82-30302

A preliminary analysis of TF34-100/400 jet engine rework data in support of the NRP system implementation on BAF Alameda
[AD-A110452] - p0550 A82-32308

Rough analysis of installation effects on turbocompressor performance
[NASA-TM-82924] - p0574 A82-32202

Integrated airframe propulsion control
[ASIAA-CB-3696] - p0593 A82-32382

Automated procedure for developing hybrid computer simulations of turbofan engines. Part 1: General description
[NASA-TP-1851] - p0650 A82-33320

The CF6 jet engine performance improvement: Low pressure turbine active clearance control
[ASIAA-CB-165577] - p0610 A82-33393

Circumferentially segmented duct liners optimized for axisymmetric and standing wave sources -- reducing noise from turbofan engines gatlerkin method acoustic attenuation
[NASA-TP-2075] - p0614 A82-34190

TURBOFANS

Stability analysis of the twin node model of coupled flot/sonic.tormion vibrations in turbofans
[HASA-TP-2057] - p0143 A82-15057

Aerodynamic considerations in the prediction of uninstalled supersonic flutters in transonic fans
[HASA-TP-2058] - p0143 A82-15058

Evaluation of the effects of model scale and test technique on jet-induced effects
[HASA-TP-2058] - p0361 A82-21367

TURBOFAN AIRCRAFT

U-JET AIRCRAFT

TURBOFAN ENGINE CONTROL

An approach to robust non-linear control design -- with illustration of J-85 turbojet engine simulation
[NASA-TP-12132] - p0045 A82-12132

Transport engine control design
[BASA-PAPER 82-15975] - p0046 A82-15975

Performance of a 20-CD axisymmetric exhaust nozzle on a turbojet engine at altitude
[AIAA PAPER 82-1587] - p0097 A82-40420

Compressor stall inducing installation effects of an engine control parameter for the CF-5 aircraft
[NASA-TP-12085] - p0095 A82-12085

TURBOFAN ENGINES

NT BRISTOL-SIDDELEY BS 53 ENGINE
NT J-58 ENGINE
NT J-79 ENGINE
NT J-85 ENGINE
NT T-56 ENGINE
NT TURBOFAN ENGINES

NT TURBOPROP ENGINES

Study of reingestion of exhaust gases with different initial temperature in a reversed turbojet engine
(BASA-TP-2075) - p0614 A82-34190

The operational characteristics of turbojets, giving particular attention to the cooled high-pressure turbine
[HASA-TP-8210] - p0065 A82-14404

Optimization of requirements on the pitting-prevention properties of turbojet-engine oils
[HASA-TP-8212] - p0082 A82-15723

An application of total synthesis to robust coupled design -- turbojet engine control
[HASA-TP-8215] - p0159 A82-19061

Low grade fuels for turbo and jet engines
[HASA-TP-8218] - p0221 A82-23435

A-446
SUBJECT INDEX

Analysis of the characteristics of a bypass engine, with allowance for variable pressure losses in the channels  p0282 A82-26496
Advanced engine technology and its influence on aircraft performance  p0298 A82-28515
Environmental and high strain rate effects on composites for engine applications  (AIAA 82-0758)  p0336 A82-30118
Solution to a bistable vibration problem using a plain, uncentered squeeze film damper bearing  (AIAA PAPER 82-GT-201)  p0430 A82-35455
The powerplant of the Yak-40 and 8-15 aircraft --- Russian book  p0434 A82-36947
Performance of a 2D-C0 nonaxisymmetric exhaust nozzle on a turbojet engine at altitude  (AIAA PAPER 82-1137)  p0457 A82-40420
Research on the behavior of a turbojet engine during internal and external disturbances with respect to early recognition of damage --- German thesis  p0563 A82-40561
The nonsynchronous whirls of the turbine rotor in aerojet engines  p0510 A82-40944
Initial experimental research into the response of a turbojet engine compressors to distortion of intake pressure  p0032 A82-11006
A preliminary experimental investigation of the response of a turbojet engine to intake pressure distortion  p0032 A82-11007
Vacation test procedures for accessory angle drives gearboxes on Atlas 9DC engines --- turbojet engines  (AA-A105269)  p0088 A82-12076
Conditions of generation and methods of damping the inlet vortex of a turbojet engine  (NASA-TN-67676)  p0305 A82-20182
Optimization of thrust algorithm calculation for Computing System (FCS) for Thrust the NASA Highly Maneuverable Aircraft Technology (HiHAT) vehicle's propulsion system  (NASA-CR-163121)  p0317 A82-21198
Turbojet and turbojet engine optimization  p0362 A82-23174
Basic technology of squeeze-film dampers for rotor dynamics control  (AA-A110842)  p0369 A82-23250
Development of high-speed rolling-element bearings. A historical and technical perspective  (NASA-TN-62864)  p0398 A82-24947
An investigation of engine and test cell operating conditions on the effectiveness of smoke suppressant fuel additives  (AA-A112800)  p0476 A82-27527
Environmental and High-Strain Rate effects on composites for engine applications  (NASA-TN-62862)  p0571 A82-31449
An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacity  (AA-A116171)  p0571 A82-31548

TURBOMACHINERY BLADES
WT COMPRESSOR BLADES  ---  ---  ---  ---  ---
WT ROTOR BLADES (TURBOMACHINERY)  ---  ---  ---  ---  ---
WT STATOR BLADES  ---  ---  ---  ---  ---
WT TURBINE BLADES  ---  ---  ---  ---  ---

Dynamic response of blades and vanes to wakes in axial turbomachinery  (ASME PAPER 81-DEP-33)  p0160 A82-19307
A practical approach to systems node analysis --- for disc-blade-shroud assemblies  (ASME PAPER 81-DEP-130)  p0162 A82-19348
A parametric study of dynamic response of a discrete model of turbomachinery blade dist  (ASME PAPER 81-GT-137)  p0162 A82-19349
Torsional vibrations of non-uniform rotating blades with attachment flexibility  (ASME PAPER 82-GT-327)  p0276 A82-26313
Prediction of aerodynamically induced vibrations in turbomachinery blades  (ASME PAPER 82-GT-898)  p0327 A82-28906
Turbulent boundary-layer development on a two-dimensional aerofoil with supercritical flow at low Reynolds number  (ASME PAPER 82-GT-113)  p0425 A82-35346
A computational design method for transonic turbomachinery cascades  (ASME PAPER 82-GT-117)  p0425 A82-35348
A mixed-flow cascade passage design procedure based on a power series expansion  (ASME PAPER 82-GT-121)  p0425 A82-35351
An examination of the dynamics of rotary machines --- French thesis  p0492 A82-39667
Numerical calculation of the flow in a compressor and turbine cascade --- German thesis  p0552 A82-43722
Modeling of thermal effects when investigating the thermal fatigue life of the blades of a gas-turbine engine  p0581 A8-46832
Calculation of natural modes of vibration for rotor blades by the finite element method  (AIAA 82-10452)
Aerodynamic response of a blade in pitching oscillation with partial and full separation --- measurement of the instantaneous pressure distribution around a vibrating blade surface in a wind tunnel  p0142 A82-15047
Damping for turbine blade variations in subsonic flow  p0142 A82-15048
Self excited flow oscillation in the low pressure steam turbine cascade  p0142 A82-15049
Numerical experiments on unsteady flows through vibrating cascades  p0142 A82-15052
Computer aided investigation of turbine aerodynamics and aeroelasticity  p0143 A82-15053
A method for force determination from vibration response measurements --- application to turbine blade  p0143 A82-15055
Effect of mean blade loading on supersonic cascade flutter  p0143 A82-15056
Calculation of nonstationary force ratios on blades of a rotating row in incompressible flow  p0144 A82-15061
The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade  p0144 A82-15063
Approach to the fatigue analysis of vertical-axis wind-turbine blades  (82-003193)  p0308 A82-20573
Directional solidification: Project 82 --- of gas turbine blade alloys  (P68-90088)  p0356 A82-22279
Aerodynamic forces acting on the blades of stall-regulated propeller type windmills  (ASME PAPER 82-00175)  p0573 A82-31718
TURBOPROP AIRCRAFT

Propulsion study for Small Transport Aircraft Technology (STAT) [NASA-CE-165493] p0027 N82-10037
Engine superficial temperature and infrared signature p0247 N82-18136
A study to define the research and technology requirements for advanced turbo/propfan transport aircraft [NASA-CE-166138] p0254 N82-18202
Advanced general aviation comparative engine/airframe integration study [NASA-CE-165564] p0354 N82-22263
Turboprop and turbojet ejection optimization p0362 N82-23174
Study of advanced propulsion systems for Small Transport Aircraft Technology (STAT) program [NASA-CE-165610] p0396 N82-24202
Future propulsion opportunities for computer assisted airplanes [NASA-CE-828800] p0396 N82-24203
Propulsion/AACE [NASA-PACTS-9/7/8-81] p0408 N82-25251
Summary and recent results from the NASA advanced high speed propeller research program [NASA-CE-167338] p0447 N82-26219
Propulsion opportunities for future computer aircraft [NASA-CE-82915] p0454 N82-26490
Rough analysis of installation effects on turboprop noise [NASA-CE-82924] p0574 N82-32082
Advanced turboprop testbed systems study. Volume I: Testbed program objectives and priorities, drive system and aircraft design studies, evaluation and recommendations and wind tunnel test plans [NASA-CE-167928-VOL-1] p0591 N82-32370
Advanced turboprop testbed systems study [NASA-CE-167855] p0607 N82-33375
Ceramic gas turbine engine demonstration program [AD-A170088] p0610 N82-33395

TURBOPROCKET ENGINE

Advanced turbine study --- airfoil cooling in rocket turbines [NASA-CE-162003] p0369 N82-23249

TURBOMOTORS

U TURBINE WHEELS

TURBOSHAFTS

Minimum cost performance monitoring of turboshaft engines p0172 A82-20544
Development of a helicopter rotor/propulsion system dynamics analysis [AIAA PAPER 82-1678] p0146 A82-34997
Design Criteria of the A 129 helicopter drive system [NASA-CE-166190] p0208 N82-17215
Measurement techniques used to assess the installed power of a helicopter engine p0246 N82-18133

TURBULENCE

BT ATMOSPHERIC TURBULENCE

BT CLEAR AIR TURBULENCE

BT GUSTS

BT LOW LEVEL TURBULENCE

Effects of Reynolds number and turbulence level on axial cascade performance p0205 N82-17190
Generation of noise by turbulence p0172 A82-20544
Development of a helicopter rotor/propulsion system dynamics analysis [AIAA PAPER 82-1678] p0146 A82-34997
Design Criteria of the A 129 helicopter drive system [NASA-CE-166190] p0208 N82-17215
Measurement techniques used to assess the installed power of a helicopter engine p0246 N82-18133

TURBULENCE EFFECTS

The influence of turbulence models on computer-simulated aircraft landing
TURBULENT MIXING

Turbulence measurements in a confined jet using a
near-orientation hot-wire probe technique
[AIAA PAPE 82-1262] p0439 A82-37710
Fluid dynamics of jets with applications to V/STOL
[AD-AID-CP-308] p0360 A82-23150

TURBULENT MIXING

An experimental and analytical study of mixing
flow of turbine exhaust through circular
and 2-dimensional mixer/nozzle
[AIAA PAPE 82-0130] p0286 A82-27007
Numerical study of vibrational relaxation in the
volatile mixing of jets in a supersonic nozzle
[783A4A 82-29900

TURBULENT WAKES

ST PROPELLER SLIPSTREAMS

Reductions in parasite drag due to forebody wake effects
[AIAA PAPE 81-1939] p0007 A82-10417
Rotor wake characteristics relevant to
rotor-stator interaction noise generation
[AIAA PAPE 81-2031] p0008 A82-10456
Instantaneous turbulence profiles in the wake of an
oscillating airfoil
[AIAA PAPE 82-0353] p0119 A82-17501
Dynamic response of blades and vanes to engine
an axial turbomachinery
[ASME PAPE 81-DIT-33] p0160 A82-19307
Effect of wakes of upstream stator blades on the
rotor of an axial flow compressor
p0276 A82-26208
Secondary flow effects and mixing of the wake
behind a turbine stator
[AIAA PAPE 82-GT-86] p0422 A82-35304
Turbulent wake development behind streamlined bodies
p0507 A82-13104
Effect of modification of the trailing edge of a
separating wall on the downstream mixing of
parallel lowing streams
[AIAA PAPE 82-11124] p0394 A82-24101

TURBULENT FLOW

Efficient combinations of numerical techniques
applied to aircraft turning performance
optimization
p0241 A82-26104
Optimal three-dimensional turning performance of
supersonic aircraft
[AIAA PAPE 82-1326] p0688 A82-39103
Flight dynamics of rotorcraft in steep high-g turns
[AIAA PAPE 82-1345] p0688 A82-39117
Mineral time turning into a point of
supersonic aircraft
p0556 A82-44482
Observability of the parameters of an initial
navigational systems for a 360-deg coordinated turn
p0583 A82-47093
Radar and near radar collisions on two- and
three-dimensional curvilinear flight paths
[AIAA-TR-685] p0253 A82-18200
Validation of zero-order feedback strategies for medium range air-to-air interception in a
horizontal plane
Minimum time turns constrained to the vertical plane
[AD-A11193] p0056 A82-26317

TVG (CONTROL)

U THRUST VECTOR CONTROL

Twisted Wings

The aerodynamic influences of rotor blade taper,
twist, airfoils and solidity on hover and
turn performance
[AD-A111937] p0605 A82-33357
Twisting

Means for controlling aerodynamically induced twist
[NASA-CASE-LAE-12175T-1] p0523 A82-28279

TWO DIMENSIONAL BODIES

Low Reynolds number airfoil survey, volume 1
[AIAA-TR-156800-70L-1] p0311 A82-14059
Two-dimensional boundary layer
A two-dimensional boundary-layer program for
airfoil turbine heat transfer calculation
[AIAA PAPE 82-GT-93] p0424 A82-35336

TWO DIMENSIONAL FLOW

Control laws for adaptive wind tunnels
[ASME PAPE 82-10958 p0012 A82-10985
ADES plane flow properties for infrared analysis
--- Augmented Deflecting Exhaust Nozzle
p0174 A82-17606
A contribution to the hodograph method for
shock-free transonic airfoil sections

SUBJECT INDEX

Supercritical flow past symmetrical airfoils
p0121 A82-18022
Results of recent measurements on an oscillating
airfoil
p0275 A82-26130
A vortex sheet method for calculating separated
two-dimensional flows at high Reynolds number
[AIAA PAPE 82-1030] p0375 A82-31978
Turbulent boundary-layer development on a
two-dimensional aerofoil with supersonic flow at
low Reynolds number
p0389 A82-34998
Analysis of two-dimensional internal flows using a
primitive-variable relaxation Navier-Stokes
procedure
[AIAA PAPE 82-1083] p0416 A82-34998
Approximate boundary condition procedure for the
two-dimensional numerical solution of vortex wakes
[AIAA PAPE 82-0951] p0047 A82-27467
Aerodynamic performance of high turning core
turbine vanes in a two-dimensional cascade
[AIAA PAPE 82-1288] p0049 A82-37716
The use of adaptive walls in plane flows
[OBSA, TP. NO. 1982-JF] p0548 A82-42813
An aerodynamic design method for transonic axial
flow compressor stage
p0032 A82-10994
Theoretical investigations and experimental
researches for higher subsonic two-dimensional
compressor cascade
p0033 A82-11024
Effects of Reynolds number and turbulence level on
axis cascade performance
p0205 A82-17190
Nonlinear two-dimensional stall theory
[AD-A110450] p0045 A82-25220
Floors over wings with leading-edge vortex separation
[AIAA-TR-156806] p048 A82-26230
Application of a transonic similarity rule to
correct the effects of sidewall boundary layers in
two-dimensional transonic wind tunnels
[AIAA-3815-018047] p0594 A82-32284

TWO PHASE FLOW

The relative motion of a particle in the case of
exponential changes of the velocity of the medium
p0281 A82-26479
Liguid particle dynamics and rate of evaporation
in the rotating field of centrifugal compressors
[AIAA PAPE 82-GT-86] p0423 A82-35332
Two-phase transpiration cooling
[AIAA PAPE 82-GT-89] p0423 A82-35333

TWO STAGE TURBINES

The two stage engine turbine
p0204 A82-17183

T2J AIRCRAFT

U 1-2 AIRCRAFT

U.S.C.A.M.

Factors shaping conceptual design of turboprop aircraft
[AD-A111937] p040 A82-37773

983-13 HELICOPTER

U 983-13 HELICOPTER

983-1 HELICOPTER

Helicopter icing spray system - Improvements and
flight experience
p0023 A82-12696
Adaptation of pultrusion to the manufacture of
helicopter components
p0501 A82-40537
Performance testing of a main rotor system for a
utility helicopter at 1/4 scale
[AD-A111937] p0352 A82-22521
Flight tests for the assessment of tank
performance and control activity
p0365 A82-23213

983-60A HELICOPTER

Design and fabrication of a composite rear
fuselage for the DH-60 /Slack Hawk/
[AD-A111937] p0502 A82-40534

ULTRA SHORT WAVE RADIO EQUIPMENT

U VERY HIGH FREQUENCY RADIO EQUIPMENT
Responses of oscillating wings in weak shear flow
The structure of a separating turbulent boundary layer. I - mean flow and Reynolds stresses, II - Higher-order turbulence results
Complete velocity profile and 'optimum' skin friction formulas for the plane wall-jet
The relative motion of a particle in the case of exponential changes of the velocity of the medium
Three dimensional turbulent boundary layer development on a fan rotor blade
On the performance prediction of a centrifugal compressor scaled up
An experimental and numerical study of 3-D rotor wakes in hovering flight
Aerodynamic calculations and design of subcritical aerofoils
Roll-up model for rotor wake vortexes, part 5
The two stage aero engine turbine
End-wall boundary layer calculation methods
Factors influencing velocity distributions at inlet/counterbalances
An experimental investigation of the flow field of an ejector wing design employing a photon correlation laser velocimeter
Development and utilization of a laser velocimeter system for a large transonic wind tunnel
The application of NASA/Differential GPS in the civilian community
Boom probe position error corrections for Sea King MK 50 flight tests
Velocitc fields
U-VELOCITY DISTRIBUTION
U-VELOCITY MEASUREMENT
WIND VELOCITY MEASUREMENT
Hard limited approaches to correlation velocity sensoring
Experimental investigation of a jet inclined to a subsonic crossflow
Measurements of velocity distributions in the leading edge vortex of a delta wing by the laser-Doppler procedure
The use of groundspeed, in a wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed
Non-steady velocity measurement of the wake of a helicopter rotor at low advance ratios
A velocity vector measuring system with 13 asymmetric wedge type yawmeters -- measuring flow distribution around the empennage of STOL models
Development and laboratory testing of a thermal emission velocimeter for application to an erosion nose tip test facility
Correcting for turbulence effects on average velocity measurements made using five-hole spherical pitot tube probes
Development and utilization of a laser velocimeter system for a large transonic wind tunnel
Velocity profiles
U-VELOCITY DISTRIBUTION
VELOCITY ERRORS
Experimental performance evaluation of 'ventilated mixers' - a new mixer concept for high hypsos
SUBJECT INDEX

[IAAA PAPER 81-2613] p0107 A82-16904
Greenlandair VTOL transportation study

[IAAA PAPER 81-2642] p0108 A82-16912
VTOL as it applies to resource development in the
Canadian north

[IAAA PAPER 81-2640] p0156 A82-19215
Analysis of selected VTOL concepts for a civil
transportation mission

[IAAA PAPER 81-2655] p0157 A82-19220
Tak-36 Forge - The brand X VTOL fighter

OS Navy begins slow shuffle towards V/STOL
Vertical takeoff technology - Flight mechanics,
aerodynamics, and propulsion systems --- German

JVC, what an opportunity --- Joint Services
Advanced Vertical Lift Aircraft Program

An X-Wing aircraft control system concept
[IAAA 82-1540] p0057 A82-39091
An analysis of a nonlinear instability in the
implementation of a VTOL control system during
hover
[IAAA 82-6511] p0057 A82-38890
Support of the HH-65A - The impact of advanced
technology of VTOL systems upon existing product
support
p0501 A82-40561

An investigation of scale model testing of VTOL
aircraft in hover
p0507 A82-40911
An investigation of automatic guidance concepts to
steer a VTOL aircraft to a small aviation
facility ship
[NASA-CE-152407] p0191 A82-16087
Review of defense-related vertical and short
takeoff and landing (V/STOL) aircraft programs
[GPS-55-278] p0254 A82-18025
A short takeoff performance computer program
[AD-A1096861] p0304 A82-20179

A translational velocity command system for VTOL
aircraft in hover
p0507 A82-40911
Aerodynamic analysis of VTOL inlets and deflection
of a short, blowing-lip inlet
[NASA-CR-165617] p0349 A82-22211
An analysis of a nonlinear instability in the
implementation of a VTOL control system during
hover
[NASA-TM-84220] p0356 A82-22281
Jet V/STOL wind-tunnel simulation and groundplane
effects

The modeling and prediction of multiple jet VTOL
aircraft flow fields in ground effect
p0361 A82-23165
Evaluation of the effects of model scale and wind
technique on jet-induced effects
p0361 A82-23166
Current developments lighter than air systems ---
heavy lift airships
[NASA-TM-84744] p0394 A82-24176
Study of VTOL in ground-effect flow field
including temperature effects ---

[NASA-CR-166258] p0400 A82-25170
Lateral control system design for VTOL landing on
a D063 in high sea states
[NASA-CR-169074] p0456 A82-26315
Control optimization, stabilization and computer
algorithms for aircraft applications
[NASA-CR-169015] p0461 A82-27009

VERTICAL TAKEOFF AND LANDING

U VERTICAL TAKEOFF
U MILITARY HELICOPTERS
U CIVIL AIRCRAFT
U VTOL MILITARY HELICOPTERS
U MILITARY AIRCRAFT

U VTOL HIGH FREQUENCIES

VHF radio link for ground-air-ground
communications using an integrated voice-data
modulation
p0831 A82-38405
Combined amplitude-phase modulation for a VHF
communication link
p0053 A82-43870

Improved 243 MHz homing antenna system for use on
helicopters
VIBRATION DAMPING

[IAAA-AP-81022-0] p0523 A82-28276
VERY HIGH FREQUENCY RADIO EQUIPMENT
VHF broadcast interference related to airborne ILS,
VOR and VHF communications
[RTCA/DO-176] p0268 A82-19419
Investigation of the effects of airborne
installation factors on receiver interference
p0268 A82-19422

VERY HIGH SPEED INTEGRATED CIRCUITS
U BASIC (CIRCUITS)

VERY LOW FREQUENCIES
Omega station 10.2 kHz signal selection made easy
p0022 A82-12638
Long-range radio NAV/COMM signal reliability
p0544 A82-41951

VHF ORANGE NAVIGATION
VOR waveform synthesis and calibration
p0016 A82-16563
Solid-state VOR with remote maintenance and
monitoring
p0122 A82-18199
Navigation system integrity and reliability for
civil aviation
p0124 A82-18159
Investigation of Wilcor model 585B very high
frequency omnidirectional radio range (VOR)
system, part 3
[AD-A107855] p0200 A82-17149
VHF broadcast interference related to airborne ILS,
VOR and VHF communications
[RTCA/DO-176] p0268 A82-19419
Investigation of technical requirements
p0268 A82-19420
Investigation of airborne VHF communication and
navigation equipment
p0402 A82-25185
Ground speed measurement from DME/VHF omni
range navigation (VOR) data

BASIC (CIRCUITS)

Very high speed integrated circuits in the	second generation. II - Entering Phase I
p0182 A82-21048

VIBRATION
U VIBRATION
U TURBULENCE VIBRATION
U WAVINESS VIBRATION
U TORSIONAL VIBRATION
U TRANSVERSE VIBRATION
Vibration levels in Army helicopters: Measurement
recommendations and data
[AD-A108131] p0255 A82-18209
Aerodynamically induced vibration
[AD-A110493] p0455 A82-26306
Aeroelastic analysis for helicopter rotors with
blades appended pendulum vibration absorbers.
Mathematical derivations and program user's manual
[NASA-CE-165096] p0560 A82-31298
Coupled rotor/airframe vibration analysis program
manual manual. Volume 1: User's and
programmer's instructions
[NASA-CE-165891] p0573 A82-31965
Coupled rotor/airframe vibration analysis program
manual. Volume 2: Sample input and output
listings
[NASA-CE-165892] p0573 A82-31966
The Shock and Vibration Digest, volume 14, no. 3
[AD-A112586] p0596 A82-32525
Subsynchronous vibrations of rotor systems
p0596 A82-32528

VIBRATION DAMPING
U VIBRATION DAMPERS
U VIBRATION ISOLATORS
VIBRATION DAMPING

'Quiet please' --- aircraft hydraulic systems
noise reduction
p0010 A82-10854
Wing/store flutter - An adaptive control
application
p0044 A82-13122
VIBRATION EFFECTS

Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center
[ASME PAPER 81-D7E-46] p0161 A82-19310

Self-oscillations of the front caster wheel strut for a given track width under the assumption of the wheel drift hypothesis
[ASME PAPER 82-0368] p0120 A82-19708

Balancing of flexible rotors by the complex modal method
[ASME PAPER 81-D7E-46] p0161 A82-19310

Solution to a bistable vibration problem using a doublet lattice method for the determination of natural frequencies of twin-rotor gyrocompasses
[ASME PAPER 82-0770] p0298 A82-26513

The effect of journal misalignment on the oil-film damping of blade vibrations with allowance for the profile curvature
p0127 A82-18484

Experimental evaluation of squeeze film supported pendulum absorbers on the rotor blade
[ASME PAPER 82-0645] p0337 A82-30161

Application of coupled digital control to flexible rotors of aviation gas-turbine engines
p0282 A82-26491

The use of dynamometer readings for damping of the natural vibrations of twin-rotor gyrocompasses
p0284 A82-26620

Active flutter suppression on an F-4F aircraft
[ASME PAPER 82-0645] p0337 A82-30161

Damping and stiffness of aligned discontinuous fiber reinforced polymer composites
[ASME PAPER 82-0712] p035 A82-30102

The test demonstration of digital control of wing/store flutter
[ASME PAPER 82-0645] p0337 A82-30161

Parameter identification for structures with neighboring natural frequencies especially for the case of flight resonance tests
p0377 A82-32136

Dry friction damping mechanisms in engine blades
[ASME PAPER 82-GT-162] p0426 A82-35383

Experimental evaluation of squeeze film supported flexible rotors
[ASME PAPER 82-GT-233] p0428 A82-35415

Solution to a bistable vibration problem using a plane, uncentralized squeeze film damper bearing
[ASME PAPER 82-GT-231] p0430 A82-35455

The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
[ASME PAPER 82-GT-235] p0430 A82-35457

A simple system for helicopter Individual-Blade-Control and its application to stall flutter suppression
p0439 A82-37765

The Helicopter Blade Revolution
[ASME PREPRINT 81-9] p0441 A82-37780

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation.
[ASME PREPRINT 81-12] p0442 A82-37785

Substructure program for analysis of helicopter vibrations
[ASME PREPRINT 81-24] p0443 A82-37795

Use of optimization in helicopter vibration control by structural modification
[ASME PREPRINT 81-27] p0443 A82-37797

Survey of active and passive means to reduce rotorcraft vibrations
p044 A82-37946

F-16 active flutter suppression program
p0444 A82-37947

Robust Kalman filter design for active flutter suppression systems
p0482 A82-38442

Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades
p0492 A82-39399

Helicopter vibration reduction by rotor blade modal shaping
p0498 A82-40514

Predesign study for an advanced flight research rotor
p0500 A82-40525

An experimental examination of compressor blade flutter
[ORBIA TN. NO. 1982-31] p0547 A82-42808

Polyurethane foams for aircraft shock mounts. 3: Vibration damping by polyether foams
[ASAE-A10496] p0040 A82-11122

Damping for turbomachinery blade vibrations in subsonic flow
p0142 A82-15048

Review of helicopter Fast Mounted Sight (HMS) base motion isolation and Line-of-Sight (LOS) stabilization concepts
p0251 A82-18166

Self-tuning regulators for multicyclic control of helicopter vibration
[NASA-TP-1996] p0305 A82-20168

Reduction of structural vibration by a dynamic absorber --- helicopter cabins
[BAE-TE-A200-1801] p0316 A82-21190

Experimental on active flutter suppression of a cantilever wing
[BAE-TE-690] p0356 A82-22202

Analysis of high load dampers
[ASTM-C-16503] p0369 A82-23208

Basic technology of squeeze-film dampers for rotor dynamics control
[AD-A108482] p0369 A82-23208

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[NASA-CH-169131] p0523 A82-28202

VIBRATION EFFECTS

Hybrid fatigue life problem - Application of Aerospacial Method

Army helicopter crew seat vibration - Past performance, future requirements
p0240 A82-24716

The Shock and Vibration Digest, volume 13, no. 9
[ASAE-CB-165893] p0565 A82-31295

The effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade
p0144 A82-15043

Response tests on a Piper PA-32 tailplane before and after damage
[AD-A106273] p0189 A82-16071

Analysis of vibration induced error in turbulence velocity measurements from an aircraft wing tip boom
[NASA-CH-3571] p0530 A82-28881

A doublet lattice method for the determination of rotor induced unsteady airloads. Analysis description and program documentation
[ASAE-CR-165893] p0565 A82-31295

Vibration Isolators

The possibility of using deformable rubber components in landing gear
p0009 A82-10496

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
p0264 A82-26620

Experimental evaluation of squeeze film supported flexible rotors
[ASME PAPER 82-GT-233] p0428 A82-35415

Solution to a bistable vibration problem using a plane, uncentralized squeeze film damper bearing
[ASME PAPER 82-GT-281] p0430 A82-35455

VIBRATION ISOLATORS

The possibility of using deformable rubber components in landing gear
p0009 A82-10496

Theoretical and experimental investigations of joint-structural damping interaction for airplane construction
p0156 A82-18103

Individual-Blade-Control and its application to flexible rotors
[ASME PAPER 81-12] p0441 A82-37780

Balancing of flexible rotors by the complex modal method
[ASME PAPER 81-12] p0441 A82-37780

Self-oscillations of the front caster wheel strut for a given track width under the assumption of the wheel drift hypothesis
[ASME PAPER 82-0368] p0120 A82-19708

Balancing of flexible rotors by the complex modal method
[ASME PAPER 81-D7E-46] p0161 A82-19310

Solution to a bistable vibration problem using a doublet lattice method for the determination of natural frequencies of twin-rotor gyrocompasses
[ASME PAPER 82-0770] p0298 A82-26513

The effect of journal misalignment on the oil-film damping of blade vibrations with allowance for the profile curvature
p0127 A82-18484

Application of coupled digital control to flexible rotors of aviation gas-turbine engines
p0282 A82-26491

The use of dynamometer readings for damping of the natural vibrations of twin-rotor gyrocompasses
p0284 A82-26620

Active flutter suppression on an F-4F aircraft
[ASME PAPER 82-0645] p0337 A82-30161

Damping and stiffness of aligned discontinuous fiber reinforced polymer composites
[ASME PAPER 82-0712] p035 A82-30102

The test demonstration of digital control of wing/store flutter
[ASME PAPER 82-0645] p0337 A82-30161

Parameter identification for structures with neighboring natural frequencies especially for the case of flight resonance tests
p0377 A82-32136

Dry friction damping mechanisms in engine blades
[ASME PAPER 82-GT-162] p0426 A82-35383

Experimental evaluation of squeeze film supported flexible rotors
[ASME PAPER 82-GT-233] p0428 A82-35415

Solution to a bistable vibration problem using a plane, uncentralized squeeze film damper bearing
[ASME PAPER 82-GT-281] p0430 A82-35455

The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
[ASME PAPER 82-GT-235] p0430 A82-35457

A simple system for helicopter Individual-Blade-Control and its application to stall flutter suppression
p0439 A82-37765

The Helicopter Blade Revolution
[ASME PREPRINT 81-9] p0441 A82-37780

A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation.
[ASME PREPRINT 81-12] p0442 A82-37785

Substructure program for analysis of helicopter vibrations
[ASME PREPRINT 81-24] p0443 A82-37795

Use of optimization in helicopter vibration control by structural modification
[ASME PREPRINT 81-27] p0443 A82-37797

Survey of active and passive means to reduce rotorcraft vibrations
p044 A82-37946
VISCOELASTICITY

VISCOELASTIC FLOW

VISCOELASTICITY

Research and development program for non-linear constitutive equation for time-temperature dependent viscoelastic materials. [NASA CR-165513]

Nonlinear constitutive theory for turbine engine blades. [p0613 N82-33749]

VISCOELASTICITY

Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CPV tunnel. [NASA CR-82-15359]

VISCOUS FLOW

VISCOUS DRAG

NASA research on viscous drag reduction. [NASA CR-82-25474]

VISCOUS FLOW

VISCOUS DRAG

A vortex sheet method for calculating separated flows around fighter-type forebodies and afterbodies. [NASA CR-82-10821]

Aerodynamics on a transport aircraft type. [NASA CR-82-16080]

Hypersonic airfoil flow simulation. [NASA CR-82-10634]

Calculations of viscous transonic flow over aerfoils. [NASA CR-82-140897]

Skin friction lines. [NASA CR-82-140907]

An inviscid-viscous interaction treatment to predict the blade-to-blade interaction of axial compressors with leading edge normal shock waves. [ASME PAP 82-07-135]

NASA research on viscous drag reduction. [NASA CR-82-140907]

Viscous transonic airfoil flow simulation. [NASA CR-82-140907]

The numerical solution of incompressible turbulent flow over airfoils. [NASA CR-82-12060]

Experimental methods for the prediction of the effect of viscosity on propeller performance. [NASA CR-82-12060]

Aerofoil dynamics on a transport aircraft type. [NASA CR-82-12060]

More than meets the eye - The oil dot technique. [p0228 A82-27144]

A vortex sheet method for calculating separated two-dimensional flows at high Reynolds number. [NASA CR-82-1030]

VISIBILTY

VISIBILITY

Deficiencies and constraints that affect the design of cockpit enclosures and transparencies. [p0226 A82-24303]

Development and test of a tactical visibility sensor. [p0579 A82-15820]

Use of a helmet-mounted matrix display for presenting energy-manoeuvrability information during simulated close combat. [p0892 N82-13061]

The optical recognition of sea targets as a function of surrounding and observation parameters in air to water observations. [MRWE-FHMS-01-10]

Transparent Cryogenic Tunnel. [p0597 N82-32678]

VISCOSITY

RELATIONSHIPS

Research and development program for non-linear structural modeling with advanced time-temperature dependent constitutive relationships. [NASA CR-165513]

Nonlinear constitutive theory for turbine engine structural analysis. [p0613 N82-33749]
VORTEX WINGS
Scattering of sound by a vortex ring
p0104 A62-16148

VORTEX SHEDDING
Low-speed aerodynamic characteristics of wings
with sweep discontinuities
p0365 A62-33997
Water tunnel flow visualization and wind tunnel
data analysis of the F/A-18 --- leading edge
evolution vortex effects
p0004 B62-25215
Flows over wings with leading-edge vortex separation
p0486 B62-26238

VORTEX SHEETS
Recent advances in applying Free Vortex Sheet
theory to the estimation of vortex flow
aerodynamics
[AlAA PAPER 82-0095] p0183 A62-22045
The vortex flow field generated by a hovering
helicopter
p0297 A62-26227
A vortex sheet method for calculating separated
two-dimensional flows at high Reynolds number
[AlAA PAPER 82-1030] p0177 A62-31978
On the vortex flow over delta and double-delta wings
[AlAA PAPER 82-0549] p0037 A62-37466
A method of predicting fuselage loads in hover
p0250 B62-18164
Flows over wings with leading-edge vortex separation

VORTEX TUNES
The concept of the vortex sheet
p0116 A62-11899
A vortex sheet program with grid refinement
[AlAA PAPER 82-0253] p0213 A62-17350

VORTEXES
BT WINGTip VORTICES
Increasing the lift:drag ratio of a flat delta wing
p0016 A62-11899
The CTVIC - A concept in vortex induced
combustion. II
[ASME PAPER 81- GT-12] p0017 A62-11997
On unsteady aerodynamic forces and moments of the
circular wing - wing blades /experiments of the
outward-flow case/
[AlAA PAPER 82-0549] p0037 A62-37466
Propeller tip vortex - A possible contributor to
aircraft cabin noise
p013 A62-16004
Aerodynamic characteristics of waveriders at
subsonic flight speeds
p0113 A62-17603
Recent advances in applying Free Vortex Sheet
theory to the estimation of vortex flow
aerodynamics
[AlAA PAPER 82-0095] p0183 A62-22045
The requirements for reduced IR separations on
final approach
p0219 A62-23311
Secondary flow effects and mixing of the wake
behind a turbine stator
[ASME PAPER 82- GT-46] p0022 A62-35304
On the vortex flow over delta and double-delta wings
[AlAA PAPER 82-0549] p0437 A62-37466
Investigations regarding vortex formation at wings
with bent leading edges
p0083 A62-38783
Measurements of velocity distributions in the
leading edge vortex of a delta wing by the
laser-Doppler procedure
p0083 A62-38786
The use of linearized-aerodynamics and vortex-flow
methods in aircraft design /invited paper/
[AlAA PAPER 82-1384] p0097 A62-40294
Prediction of high alpha flight characteristics
utilizing rotary balance data
p0510 A62-40953
Vortex formation over double-delta wings
[AlAA PAPER 82-0549] p0414 A62-40953
Spanwise distribution of vortex drag and
leading-edge suction in subsonic flow
p0516 A62-41005
Fuselage effects in leading edge vortex flap
aerodynamics
p0516 A62-41006
Experimental and analytical studies of a model
helicopter rotor in hover
p0497 A62-40294
Protection of advanced electrical power systems from atmospheric electromagnetic hazards [AD-A112612] p0477 N82-27658

Alternative employment concepts for remotely Piloted Vehicle (RPV) FLIR/TV mission payload [AD-A117077] p0608 N82-33739

W WINGS
V VARIABLE SWEEP WINGS
WAKES
VT AIRCRAFT WAKES
VT HELICOPTER WAKES
VT NATURE WAKES
VT PROPELLER SLIPSTREAMS
VT TURBULENT WAKES

Calculations of viscous transonic flow over aerofoils [AIAA PAPER 82-0597] p0375 N82-31957

Secondary flow mixing losses in a centrifugal impeller [AIAA PAPER 82-09-44] p0421 N82-35302

The influence of flow rate on the wake of a centrifugal impeller [AIAA PAPER 82-09-45] p0421 N82-35303

Chicago somatokinetic asymptotic formulae system. Volume 2: Decay of b-707 and -0 vortexes [AD-A109516] p0293 N82-20157

Finite difference modelling of rotor flows including wake effects [NASA-TM-42480] p0604 N82-33345

WALL FLOW
Control laws for adaptive wind tunnels [AIAA PAPER 82-1032] p0115 N82-17000

Optical subsonic diffuser wall design for arbitrary entry conditions [AIAA PAPER 82-0132] p0115 N82-17000

Recent sidewall boundary-layer investigations with suction in the Langley 0.3 m transonic Cryogenic Tunnel [AIAA PAPER 82-0234] p0117 N82-18758

Transonic wind tunnel wall interference corrections for three-dimensional models [AIAA 82-0586] p0237 N82-24663

Self streamlining wind tunnels without computers [NASA-TM-42480] p0604 N82-33345

Each reflection of a shock wave from an inclined wall [NASA-JR-710] p0391 N82-34748

Casing wall boundary-layer development through an isolated compressor rotor [AIAA PAPER 82-07-18] p0420 N82-35287

Influence of casing treatment on the operating range of axial compressors [AIAA PAPER 82-07-103] p0424 N82-35340

Turbulent boundary layer on a porous surface with injection at various angles to the wall [NASA-TM-82-39482] p0492 N82-39482

Comparison of experimental and analytical performance for contoured endwall stators [AIAA PAPER 82-1286] p0497 N82-40422

Corrections for wall effects in ONERA industrial wind tunnels [NASA-CB-166187] p0367 N82-23234

Higher-order flow angle corrections for three-dimensional wind tunnel wall interference [NASA-CB-166186] p0367 N82-23234

End-wall boundary layer calculation methods [NASA-CB-166186] p0367 N82-23234

Experimental investigation of turbine endwall heat transfer. Volume 1: Description of experimental hardware and test conditions [AD-A110332] p0317 N82-21199

Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets [AD-A110333] p0317 N82-21200

Fluid dynamics of jets with applications to V/STOL [AGARD-CP-308] p0360 N82-23150

Effect of modification of the trailing edge of a separating wall on the downstream mixing of parallel flowing streams [AD-A111126] p0394 N82-26181

Three dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage [NASA-TP-82-166001] p0408 N82-25252

Comparison of experimental and analytical performance of contoured endwall stators [NASA-TP-82-166007] p0409 N82-26289

Measuring the flow properties of slotted test-section walls [FFA-135] p0529 N82-28571

Application of a transonic similarity rule to correct the effects of sidewall boundary layers in two-dimensional transonic wind tunnels [NASA-TP-84-8487] p0594 N82-33284

WALL JETS
Complete velocity profile and ' optimum ' skin friction formulas for the plane wall-jet [NASA-CB-166187] p0367 N82-23234

Flow dynamics of jets with applications to V/STOL [AGARD-CP-308] p0360 N82-23150

WALL PRESSURE
Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser [NASA-CB-166186] p0367 N82-23234

Application of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations [NASA-CH-166186] p0367 N82-23234

The pressure signature method for blockage corrections, and its applications to the industrial wind tunnel [NASA-CB-166186] p0367 N82-19321


Experimental study of turbulence in blade end wall corner region [NASA-CB-169283] p0572 N82-31639

WALL TEMPERATURE
An experimental and analytical study of mixing flow of turbofan engine exhaust through circular and 2-dimensional mixer/nozzle [NASA-CB-166186] p0367 N82-23234

WALLS
VT POROUS WALLS
VT THERMAL WALLS
VT MINT TUNNEL WALLS

WAX ENGINEERS
Advanced general aviation engine/airframe interaction studies [NASA-CH-165565] p0354 N82-22268

Real time pressure signal system for a rotary engine [NASA-CH-165565] p0354 N82-22268

Advanced stratified charge rotary aircraft engine design study [NASA-CH-165565] p0478 N82-27743

WING GUNS
Evaluation of aircraft in simulated combat: Computer against computer or computer against human pilot [NASA-CB-166186] p0367 N82-23234

WARFARE
VT ARTISAN WARFARE
VT CONTEST
VT ELECTRONIC WARFARE

Type ' A ' V/STOL - One aircraft for all support missions [AIAA PAPER 82-26161] p0109 N82-16917

SIMSAT - An air battle simulation of the USAF Tactical Air Control System (TACS)/ with Advanced Tactical Radars [NASA-A116226] p0158 N82-19256

WARHEADS
Analysis methods for predicting structural response to projectile impact [NASA-A116226] p0202 N82-17162

WARNING
W HEATING
WARMING DEVICES
W WARNING SYSTEMS

A-464
WASTE DISPOSAL

Development of in-can melting process and equipment, 1979 and 1980

[AD-A110992] p0304 A82-21092

WASTE TREATMENT

Primary sewage treatment plant as a source of bird hazards at airport

[AD-A110648] p0304 A82-21092

WASTES

BT GARBAGE

BT RADIOACTIVE WASTES

WATCHES

BT CLOCKS

WATER

BT COASTAL WATERS

BT SEA WATER

Water ingestion into axial flow compressors. Part I: Experimental results and discussion

[AD-A118430] p0216 A82-21296

Effect of water on axial flow compressors. Part II: Computational program

[AD-A118431] p0216 A82-21296

Hydrocarbon fuel chemistry: Sediment water interaction

[AD-A1177920] p0216 A82-21305

WATER CONTAMINATION

BT MOISTURE CONTENT

WATER COOLING

BT LIQUID COOLING

WATER EROSION

The effect of erosion wear on the vibration characteristics of axial-turbine blades

[AD-A110705] p0304 A82-21092

WATER LANDING

BT DISCHARGING (LANDING)

WATER POLLUTION

BT OIL POLLUTION

WATER TEMPERATURE

Effects of moisture on the mechanical properties of glass/epoxy composites

[AD-A110725] p0304 A82-21092

WATER TUNNEL TESTS

Vortex flow correlation -- water tunnel tests on thin slender wings

[AD-A110725] p0304 A82-21092

WATER TUNNELS

BT HYDRAULIC TEST TUNNELS

WATER VELOCITIES

BT AIRCRAFT CARRIERS

BT SHIPS

BT SURFACE EFFECT SHIPS

WATER WAVES

Two-frequency /Delta k/ microwave scatterometer measurements of ocean wave spectra from an aircraft

[AD-A110725] p0304 A82-21092

A comparison of Seasat-derived wave height with surface data

[AD-A110725] p0304 A82-21092

WATERPROOFING

Recent developments in materials and processes for aircraft corrosion control

[AD-A110725] p0304 A82-21092

WAVE ATTENUATION

BT ACOUSTIC ATTENUATION

BT RADAR ATTENUATION

BT RADIO ATTENUATION

WAVEFIELD aeroacoustics and optical propagation characteristics of a large-scale turret model

[AD-A110725] p0304 A82-21092

WAVE DIFFRACTION

Diffraction by a finite strip

[AD-A110725] p0304 A82-21092

Acta mechanica sinica

[AD-A110725] p0304 A82-21092

WAVE DRAG

BT INTERFERENCE DRAG

WAVE EQUATIONS

Diffraction by a finite strip

[AD-A110725] p0304 A82-21092

WAVE IRRADIATION

BT ACOUSTIC IRRADIATION

BT MARITIME IRRADIATION
WEATHER FORECASTING

WEATHER FORECASTING

At NASA MSFC program - Developing new concepts for accurate flight planning

[IAAA PAPER 82-0340] p0119 A82-17894

FAA/WBS aviation route forecast /AIRPAC Development

[IAAA PAPER 82-0013] p0183 A82-22027

Communicating critical weather information to pilots --- (ZIBLA)

[IAAA PAPER 82-0016] p0285 A82-27082

The aviation route forecast /AIRPAC - An interactive system for pilot self-briefing --- of meteorological information

p0553 A82-33821

A modular automated approach to airfield weather systems

p0579 A82-45813

Turbulence and wind shear experiments related to aircraft operation in the terminal area

p0579 A82-45817

Aspects of clear air turbulence severity forecasting and detection

p0579 A82-45823

The WSI real-time aviation weather information system - An alternative to standard general aviation weather briefing procedures

p0580 A82-45834

Operational environment, meteorological conditions and weather forecasting

p0036 A82-11057

Aircraft icing avoidance and protection

p0200 A82-17139

Weather deterioration models applied to alternate airport criteria

[AD-A104477] p0309 A82-20011

NASA research programs responding to workshop recommendations

p0311 A82-21146

Evaluation of the FAA/WBS weather data device

[AD-A114446] p0562 A82-30800

Considerations for optimum siting of BEXBAD to detect convective phenomena hazardous to terminal area navigation, part 1 --- meteorological radar


Efficient transfer of weather information to the pilot in flight

[NASA-CR-165889] p0591 A82-32363

WEATHER FRONTS

U FRONT (METEOROLOGY)

WEATHER MODIFICATION

U LIGHTNING SUPPRESSION

WEATHER RADIATION

U METEOROLOGICAL RADIATION

WEATHER STATIONS

U AUTOMATIC WEATHER STATIONS

Instruments and installations for meteorological measurements at airports --- Russian book

p0326 A82-28826

Automated low-cost weather observation system (ALMOS)

[AD-A117447] p0614 A82-33954

WEATHERINGS

Practical aspects of instrumentation system installation, volume 13

[NASA-TR-04667] p0099 A82-13140

WEDGE FLOW

Calculation of the unsteady loads on the surface of a moving wedge with an incident shock wave

p0128 A82-18590

Hydromic interactions with surface mass transfer. I - Steady flow over a slender wedge wing

[IAAA PAPER 82-0979] p0374 A82-31944

Improved solutions to the Falkner-Skan boundary-layer equation

p0481 A82-38283

WEIGHS

Elastic-plastic finite-element analyses of thermally cycled double-edge wedge specimens

[NASA-TP-19712] p0308 A82-20566

WEIGHT (MSS)

U STRUCTURAL WEIGHT

WEIGHT ANALYSIS

Zone loading of flight-vehicle structures

p0334 A82-29038

WEIGHT INDICATORS

U MICRORADAR

U STRAIN GAGE BALANCES

The external balance system of the German-Dutch windtunnel DWB and its strain gage load cells

p0249 A82-43104

Evaluation and wind tunnel tests of the 4,000 lb (normal-force) pitch/yaw and roll dynamic stability balance systems for measuring direct, cross, and cross-coupling derivatives

[AD-A105122] p0085 A82-12007

Development and trial of a rotary balance for the 3 u low-speed wind tunnels in the Federal Republic of Germany

[DFVLB-HITT-81-18] p0279 A82-19342

WEIGHT MEASUREMENT

Assessment of burning characteristics of aircraft interior materials

[NASA-CP-166390] p0599 A82-32899

High voltage/high power for airborne applications

p0083 A82-15918

Optimal shape design of turbine blades

[ASME PAPBE 81-DE-128] p0162 A82-19342

Power system design optimization using Lagrange multiplier techniques

p0176 A82-20743

Boeing's biggest narrowbody

p0180 A82-21190

Minimum mass using of a low aspect ratio airframe for flutter-free performance

[IAAA PAPBB 80-0724] p0225 A82-24022

Fuel-efficient windshields for transport, commuter and business aircraft

p0226 A82-24304

The development of high strength lightweight windshields for the new generation of Boeing 757 and 767 airliners

p0228 A82-24323

General advanced system technology

p0230 A82-24380

Composite control tubes

p0282 A82-27423

PDME - The interface for engine data to AIDS --- propulsion multiplexer in aircraft integrated data system

[IAAA PAPER 82-1127] p0417 A82-35022

Committing composites to the Boeing 767

p0481 A82-38224

The national dynamics observer mini-BPV for tropical operation

p0493 A82-39734

Mini-BPV propulsion

p0493 A82-39736

Radars for USA

p0494 A82-39742

Electric propulsion for a mini-BPV system

p0494 A82-39744

A summary of weight savings data for composite VSTOL structure

p0502 A82-40546

Panel Optimization with Integrated Software (POIS). Volume I: PANDA: Interactive program for preliminary minimum weight design

[AD-A110563] p0411 A82-25404

WEIGHTING FUNCTIONS

Choice of weight coefficients in the problem of the optimal damping of the elastic oscillations of a wing

p0582 A82-46608

Noise measurements on the helicopter HK 117 design. Weighted noise levels and influence of airspeed

[DFPLEM-MTT-01-11] p0270 A82-19557

WEIGHTLESSNESS

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

[NASA-TR-62476] p0458 A82-26350

WELD STRENGTH

A new resin for field repair

p0291 A82-27412

WELD TESTS

In-situ radiography of titanium spar tube welds

p0350 A82-40538

WELDABILITY

Aluminum and its alloys - Weldability

p0222 A82-23755

WELDED JOINTS

U SPOT WELDS

Fatigue behavior of welded joints

p0518 A82-41115

A-468
SUBJECT INDEX

A review of the history of nondestructive testing in Japan
p0584 A82-48257

WELDING STRUCTURES
Welding for low-cost advanced titanium airframe structures
p0222 A82-23757
Production welding on the A-10 aircraft
p0327 A82-20995

WELDING
NT SHAVING
NT SPACER WELDING
NT LAYOUT WELDING
NT FUSION WELDING
NT GAS TUNGSTEN ARC WELDING
NT FLEXIBLE WELDING
Welding technology for the aerospace industry; Proceedings of the Conference, Las Vegas, NV, October 7, 8, 1980
p0222 A82-23753

WELDING MACHINES
Novel approaches to electron beam welding machine utilization
p0222 A82-23753

WIND SHEAR
WIND VELOCITY MEASUREMENT
Detection and display of wind shear and turbulence
p0046 A82-10222
Wind and temperature database for flight planning
p0046 A82-10221
The dynamic behaviour of propeller anemometers
p0276 A82-26184
The detection of low level wind shear
p0063 A82-38663
Aspects of clear air turbulence severity forecasting and detection
p0579 A82-45823
Methods for analysis of wind ripple in wind turbines
p0306 A82-20193

WIND PRESSURE
Hurricane-induced wind loads
p0476 A82-27548
Aerodynamic forces acting on the blades of stall regulated propeller type windmills
p0046 A82-29178

WIND PROFILES
Numerical and flight simulator test of the flight deterioration concept
p0193 A82-16655
Wind tunnel measurements of three-dimensional wakes of buildings --- for aircraft safety applications
p0461 A82-26924

WIND SHEAR
An airport wind shear detection and warning system using Doppler radar
p0001 A82-10220
Instrumented aircraft verification of clear-air radar detection of low-level wind shear
p0004 A82-10221
Detection and display of wind shear and turbulence
p0306 A82-10222
A decoupled control system for improved flight performance in wind shear
p0043 A82-13079

WINDSHEAR
An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airliner
p0082 A82-15823
Simulation of phugoid excitation due to hazardous wind shear
p0117 A82-17843

WINDSHEAR
WINDSHEAR COMMUNICATION
The influence of technology advances on integrated CNI avionics --- Integrated Communications, Navigation, and Identification Avionics for military aircraft
p0176 A82-20672

A-469
WIND TUNNEL APPARATUS

[AAIA PAPER 82-0215] p0117 A82-17844
An application of invariance principle to model
A two-dimensional wind tunnel for variable
coefficients and delays

[AAIA PAPER 82-0367] p0120 A82-17907
System approach to the design of wind shear
equipment

The characteristics and detection of low level
wind shear in the critical phases of flight

A documented example of strong wind-shear
determination and wind shear detection from
a tall upwind building

STOL aircraft response to turbulence generated by
a tall upwind building

The detection of low level wind shear, II

Wind shear - its effect on an aircraft and ways to
reduce the hazard, II

Optical open-loop aircraft control for go-around
maneuvers under wind shear influence

Low level wind shear detection system for airport
landing approach areas using the Bertin Doppler
acoustic sounder /Sodar/

Low level wind shear detection system for aircraft
flight test and airliners flight data

Development of a clear air radar to detect
meteorological hazards at airports

The effect of very heavy rain upon aircraft and
meteorological hazards in the terminal area

Heavy rain/wind shear accidents

Comparative study of flare control laws

The use of groundspeed, in a wind shear and the
flight evaluation of a radar-altimeter-based
system for the measurement of groundspeed

Numerical and flight simulator test of the flight
deterioration concept

Development of a clear air radar to detect
meteorological hazards at airports

Effect of heavy rain on aircraft

The Joint Airport Weather Studies Project

The effect of very heavy rain upon aircraft and
its role in wind shear accidents

Test and evaluation of the airport radar wind
shear detection system

A study of wind shear effects on aircraft
operations and safety in Australia

Considerations for optimum sitting of NEXRAD to
detect convective phenomena hazardous to
terminal air navigation, part 1 ---
environmental radar

[DOT/FAA/BD-82/56] p0586 A82-32329

WIND TUNNEL APPARATUS

NT WIND TUNNEL APPARATUS

A progress report on the European Transonic Wind
Tunnel Project

[OWERA, TP No. 1981-121] p0163 A82-19737
The effect of cowl augmentation on test-section
flow quality in the Calipso 8-ft transonic wind

[AIAA PAPER 82-0571] p0236 A82-24650
A jetson augmented choking valve for the
metering and control of inlet and bleed duct flows

[AIAA PAPER 82-0607] p0236 A82-24659
Status and capabilities of the National Full Scale
Facility 40- by 80-foot wind tunnel modification

Conditions of pulsed starting of supersonic wind

[AIAA JOURNAL 82-25795
The external balance system of the German-Dutch
windtunnel DWW and its strain gage load cells

Theoretical optimisation and experimental
verification of an injector

A-470
Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow [NASA-TR-166187]
p0367 A82-22323

Metric half-span model support system [NASA-CASE-LAB-12841-1]
p0370 A82-22325

Development of a convoluted intake seal for model B66 --- V/STOL wind tunnel [NASA-CR-166621]
p0370 A82-22325

Research model wing/tail fabrication --- transonic wind tunnel 1/7, 5-scale model [NASA-CR-166101]
p0528 A82-28280

Investigation of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Verticon Model 22 [NASA-TR-166362]
p0535 A82-29235

Sewing through flows in Langley's 0.3-meter Transonic Cryogenic Tunnel [NASA-CR-166476]
p0597 A82-32678

Cryogenic wind tunnels: A selected, annotated bibliography [NASA-TR-84747]
p0611 A82-33045

Wind TUNNEL MODELS

p0367 A82-23234

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow [NASA-TR-166187]
p0367 A82-22323

Metric half-span model support system [NASA-CASE-LAB-12841-1]
p0370 A82-22325

Development of a convoluted intake seal for model B66 --- V/STOL wind tunnel [NASA-CR-166621]
p0370 A82-22325

Research model wing/tail fabrication --- transonic wind tunnel 1/7, 5-scale model [NASA-CR-166101]
p0528 A82-28280

Investigation of correlation between full-scale and fifth-scale wind tunnel tests of a Bell helicopter Verticon Model 22 [NASA-TR-166362]
p0535 A82-29235

Sewing through flows in Langley's 0.3-meter Transonic Cryogenic Tunnel [NASA-CR-166476]
p0597 A82-32678

Cryogenic wind tunnels: A selected, annotated bibliography [NASA-TR-84747]
p0611 A82-33045
Effect on surface pressures of trapezoidal holes in a T-38 stabilizer... 

Propeller tip vortex - A possible contributor to aircraft cabin noise... 

Wind tunnel investigations for the flat plate of slender bodies at high angles of attack... 

Aerodynamic characteristics of airfoils with ice... 

Ultrasonic method for flow field measurement in subsonic and transonic flow... 

Design features of a seaborne multipurpose... 

Low speed testing of the inlet of a tandem-fan V/STOL nacelle... 

Airframe effects on top-mounted inlet systems for VSTOL fighter aircraft... 

Centerline modulation methods for a subsonic V/STOL aircraft... 

Design features of a sea-based multipurpose... 

V/STOL, STOVL, and STOL aircraft in a support role for the U.S. Navy... 

Subsonic and transonic roll damping measurements on basic airplane -- thin body calibration model... 

Ultrasonic method for flow field measurement in wind tunnel tests... 

Alleviation of the subsonic pitch-up of delta wings... 

Isolated nacelle performance -- Measurement and simulation... 

Aerodynamic characteristics of airfoils with ice accretions... 

Store separation from cavities at supersonic flight speeds... 

Aerodynamic characteristics of maneuverability... 

Aerodynamic evaluation of wings for transport aircraft... 

History of the sweptback wing... 

Recent developments in wing with stores flutter suppression... 

Aerodynamic testing conference, 12th, Williamsburg, Va., March 22-24, 1982, collection of technical papers... 

Numerical design of the contoured flexible tunnel liner for the NASA swept-wing LFC test... 

Technical innovations in testing and analysis of heat and pressure models in hypersonic wind tunnels... 

Slotted wall test section for automotive aerodynamic test facilities... 

The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives... 

Suppression of self-excited oscillations in open wind tunnels... 

The effect of induced sound on the flow around a rectangular body in a wind tunnel... 

Real-time digital filtering test in the S1 continuous wind tunnel at Manned... 

Large scale model measurements of airframe noise using cross-correlation techniques... 

Aerelasticity of compressor blades - Subsonic... 

Experimental study of oscillating-wing propulsion... 

NASA research related to sailplane airfoils... 

Mechanical properties of a fiberglass prepreg system at cryogenic and other temperatures... 

A wind-tunnel study of the aerodynamic characteristics of a slotted versus smooth-skin supercritical wing... 

Evaluation of four subcritical response methods for on-line prediction of flow onset in wind-tunnel tests... 

Flutter of forward swept wings, analyses and tests... 

Parameter identification for structures with neighboring natural frequencies especially for the case of flight resonance tests... 

Wind tunnel wall interference corrections for three-dimensional flows... 

The cryogenic wind tunnel for high Reynolds number testing... 

Wind tunnel studies of store separation with load factor - Freedrags and captive trajectories... 

Model based study of various configurations of jet crossing a cavity -- Application to the CF-19 wind tunnel of CERN... 

A review of Reynolds number studies conducted in the Langley 0.3-m Transonic Cryogenic Tunnel... 

In-flight acoustic results from an advanced-design propulsion... 

Flow visualization techniques for the study of high incidence aerodynamics... 

Selected results of the F-15 propulsion interactions program... 

In-flight acoustic results from an advanced-design... 

A review of high-speed propfans... 

Flow visualization techniques for the study of high incidence aerodynamics... 

Flow visualization techniques for the study of high incidence aerodynamics... 

Flow visualization techniques for the study of high incidence aerodynamics... 

Flow visualization techniques for the study of high incidence aerodynamics...
<table>
<thead>
<tr>
<th>SUBJECT INDEX</th>
<th>WIND TUNNEL TESTS COSTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>An X-Wing aircraft control system concept</td>
<td>Performance of highly integrated inlets for supersonic aircraft [NASA-TP-1540]  p0085 A82-38954</td>
</tr>
<tr>
<td>[NASA Paper 02-1131]</td>
<td>p087 A82-39092</td>
</tr>
<tr>
<td>An estimation of aerodynamic forces and moments on an airplane model under steady state conditions</td>
<td>Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines [NASA-TP-1526]  p0093 B82-13066</td>
</tr>
<tr>
<td>[NASA Paper 02-1361]</td>
<td>p089 A82-39126</td>
</tr>
<tr>
<td>Analytic extrapolation to full scale aircraft dynamics</td>
<td>Wind tunnel test and analysis techniques using powered simulators for civil nacelle installation drag assessment [NASA-TP-1528]  p0095 B82-13087</td>
</tr>
<tr>
<td>[NASA Paper 02-1367]</td>
<td>p090 A82-39143</td>
</tr>
<tr>
<td>Summary of sting interference effects foricone, missile, and aircraft configurations as determined by dynamic and static measurements [NASA Paper 02-1366]</td>
<td>Studies of air inlets at Reynolds numbers comparable to flight in NASA's F1 and S151A wind tunnels [NASA-TP-1530]  p0095 B82-13088</td>
</tr>
<tr>
<td>p097 A82-39095</td>
<td>The influence of closed-coupled, rear fuselage-mounted nacelles on the design of an advanced high speed wing [NASA-TP-1531]  p0096 B82-13092</td>
</tr>
<tr>
<td>An experimental and numerical study of 3-D rotor wakes in hovering flight</td>
<td>Wind-tunnel investigation of the effects of blade tip geometry on the interaction of torsional loads and performance for an articulated helicopter rotor [NASA-TP-1532]  p0097 B82-13097</td>
</tr>
<tr>
<td>p0510 A82-40946</td>
<td>Pressure distributions on three different cruciform aft-tail control surfaces of a wingless missile at Mach 1.60, 2.38, and 3.70. Volume 1: Tr这部分内容被遮挡，无法继续阅读。</td>
</tr>
<tr>
<td>Aerodynamic interactions between a 1/6-scale helicopter rotor and a body of revolution</td>
<td>Wind tunnel test and analysis techniques using powered simulators for civil nacelle installation drag assessment [NASA-TP-1533]  p0095 B82-13088</td>
</tr>
<tr>
<td>p0510 A82-40947</td>
<td>Studies of air inlets at Reynolds numbers comparable to flight in NASA's F1 and S151A wind tunnels [NASA-TP-1534]  p0095 B82-13088</td>
</tr>
<tr>
<td>The prediction of propeller/vortex interaction effects</td>
<td>The use of adaptive vails in plane flows [NASA-TP-1535]  p0035 B82-19181</td>
</tr>
<tr>
<td>p0510 A82-40948</td>
<td>Ind tunnel test and aerodynamic analysis of three aerodynamically tailored wings [NASA-TP-1536]  p0134 B82-14091</td>
</tr>
<tr>
<td>Wind-tunnel testing of V/STOL configurations at high lift</td>
<td>Relations for the thermodynamic and transport properties in the testing environment of the Langley hypersonic CF4 tunnel [NASA-TP-1537]  p0166 B82-15359</td>
</tr>
<tr>
<td>Design and tests of airfoils for sailplanes with an application to the ASW-198</td>
<td>Summary of theoretical considerations and wind tunnel tests of aeroelasticity matters for sailplane fighters [NASA-TP-1538]  p0187 B82-16046</td>
</tr>
<tr>
<td>p0512 A82-40967</td>
<td>Some experimental investigations on an aeroelastic spoiler for stall proofing a general aviation airplane [NASA-TP-1539]  p0187 B82-16050</td>
</tr>
<tr>
<td>Spin behaviour of the Pilatus PC-7 Turbo Trainer</td>
<td>Study of controlled diffusion stator blading. 1. Aerodynamic and mechanical design report [NASA-TP-1540]  p0190 B82-16081</td>
</tr>
<tr>
<td>p0513 A82-40979</td>
<td>Comparison of acoustic data from a 102 sq conic nozzle as measured in the NASA 24-foot wind tunnel and the NASA Ames 60- by 80-foot wind tunnel [NASA-TP-1541]  p0190 B82-16083</td>
</tr>
<tr>
<td>Vortex formation over double-delta wings</td>
<td>Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing [AB-107727]  p0199 B82-17134</td>
</tr>
<tr>
<td>Wind tunnel test and aerodynamic analysis of three aerodynamically tailored wings</td>
<td>A velocity vector measuring system with 13 asymmetric wedge type yawmeters measuring flow distribution around the empennage of STOL models [NASA-TP-1542]  p0213 B82-17477</td>
</tr>
<tr>
<td>p0514 A82-40985</td>
<td>Separated flow around helicopter bodies [NASA-TP-1543]  p0250 B82-18163</td>
</tr>
<tr>
<td>Funneling effects in leading edge vortex flap aerodynamics</td>
<td>Evaluation of the helicopter low airspeed system [NASA-TP-1544]  p0251 B82-18172</td>
</tr>
<tr>
<td>p0515 A82-41001</td>
<td>Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique wing research aircraft [NASA-TP-1545]  p0252 B82-18183</td>
</tr>
<tr>
<td>An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters</td>
<td>Multiple ejection effects analysis [NASA-TP-1546]  p0253 B82-18192</td>
</tr>
<tr>
<td>p0517 A82-41019</td>
<td>Effects of sting interference for incone, missile, and aircraft configurations as determined by dynamic and static measurements [NASA Paper 02-1366]  p097 A82-39095</td>
</tr>
<tr>
<td>Wind-tunnel investigation of a full-scale canard-configured general aviation aircraft</td>
<td>Effects of vortex flaps on the low-speed aerodynamic characteristics of an airfoil wing [NASA-TF-1214]  p0234 A82-11013</td>
</tr>
<tr>
<td>p0517 A82-41024</td>
<td>Wind-tunnel testing of a modified 17-percnet-thick low-speed airfoil section [NASA-TP-1548]  p0334 A82-11013</td>
</tr>
<tr>
<td>Programmable controller system for wind tunnel divergence vane</td>
<td>Icing tunnel tests of a composite porous leading edge for use with a liquid anti-ice system — tests levis icing research tunnel [NASA-CH-169966]  p0293 A82-11033</td>
</tr>
<tr>
<td>Design and tests of airfoils for sailplanes with an application to the ASW-198</td>
<td>Wind-tunnel testing of V/STOL configurations at high lift [NASA Paper 02-1367]  p097 A82-39095</td>
</tr>
<tr>
<td>p0547 A82-42813</td>
<td>Reduced integration on fighter aircraft [NASA-TP-1550]  p0190 B82-16081</td>
</tr>
<tr>
<td>Process and procedural approaches in the aerodynamic design of the Alpha Jet aircraft</td>
<td>Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing [AB-107727]  p0199 B82-17134</td>
</tr>
<tr>
<td>The design of airfoil profiles with trailing edge loading in transonic flow -- French thesis</td>
<td>A velocity vector measuring system with 13 asymmetric wedge type yawmeters measuring flow distribution around the empennage of STOL models [NASA-TP-1542]  p0213 B82-17477</td>
</tr>
<tr>
<td>p0550 A82-43328</td>
<td>Separated flow around helicopter bodies [NASA-TP-1543]  p0250 B82-18163</td>
</tr>
<tr>
<td>Standard tests of a research model rotor in a wind tunnel, including model similarity — calculations compared with measurements [NASA-FWHT-79-16]  p0255 A82-44224</td>
<td>Evaluation of the helicopter low airspeed system [NASA-TP-1544]  p0251 B82-18172</td>
</tr>
<tr>
<td>Experimental investigations of the separated flow around a rectangular wing in a wind tunnel [DPFLB-81-12]</td>
<td>Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique wing research aircraft [NASA-TP-1545]  p0252 B82-18183</td>
</tr>
<tr>
<td>p0255 A82-44224</td>
<td>Multiple ejection effects analysis [NASA-TP-1546]  p0253 B82-18192</td>
</tr>
<tr>
<td>Effects of vortex flaps on the low-speed aerodynamic characteristics of an airfoil wing [NASA-TF-1214]  p0334 A82-11013</td>
<td>Effects of sting interference for incone, missile, and aircraft configurations as determined by dynamic and static measurements [NASA Paper 02-1366]  p097 A82-39095</td>
</tr>
<tr>
<td>Wind-tunnel results for a modified 17-percent-thick low-speed airfoil section [NASA-TP-1548]  p0334 A82-11033</td>
<td>Reduced integration on fighter aircraft [NASA-TP-1550]  p0190 B82-16081</td>
</tr>
<tr>
<td>Icing tunnel tests of a composite porous leading edge for use with a liquid anti-ice system — tests levis icing research tunnel [NASA-CH-169966]  p0293 A82-11033</td>
<td>Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing [AB-107727]  p0199 B82-17134</td>
</tr>
<tr>
<td>p0305 A82-11052</td>
<td>A velocity vector measuring system with 13 asymmetric wedge type yawmeters measuring flow distribution around the empennage of STOL models [NASA-TP-1542]  p0213 B82-17477</td>
</tr>
<tr>
<td>Subsonic cascade wind tunnel tests using compressor configuration of BCA blades</td>
<td>Separated flow around helicopter bodies [NASA-TP-1543]  p0250 B82-18163</td>
</tr>
<tr>
<td>Subsonic cascade wind tunnel tests using compressor configuration of BCA blades [NASA-CH-168578]  p0267 B82-19224</td>
<td>Construction and performance of MAL two-dimensional transonic wind tunnel [MAL-TE-647]  p0085 A82-12083</td>
</tr>
</tbody>
</table>
A study of flight control requirements for advanced, winged, earth-to-orbit vehicles with far-aft center-of-gravity locations [NASA-TP-16311] 0067 882-19226
A descriptive study of the application of analysis of variance and regression techniques in an error analysis program for test data obtained in a 16 foot transonic tunnel [NASA-CR-16587]
Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations [NASA-TP-1976] 0039 882-20977
Wind-tunnel fan transition section model test --- in the Low Research Center 10- by 10 foot wind tunnel [NASA-CR-16587]
Low-speed measurements of the static pressure distribution and overall forces on a cambered and a symmetric wing of aspect ratio 1.0 --- in a wind tunnel [EIA-TH-60065] 0012 882-21158
Pressure distributions on some delta wings at ή = 4 --- wind tunnel tests [EIA-TH-60065] 0012 882-21161
A preliminary comparison between the 82-3 propeller noise in flight and in a wind tunnel [NASA-TH-82005] 0032 882-19988
Aeropulse survey of wind tunnel test-sections of small and large scale rotors [KFA-TH-62-10-107] 0030 882-22225
Experiments on active flutter suppression of a cambered wing [IAT-TH-6901] 0036 882-22282
Fluid dynamics of jets with applications to V/STOL [AOARD-CP-308] 0060 882-23150
Jet V/STOL wind-tunnel simulation and ground plane effects [AOARD-CP-308] 0060 882-23156
Wind tunnel investigations of sailplane fuselages with different length and wing settings --- aerodynamic drag measurement [AOARD-CP-308] 0064 882-23200
Evaluation of four subcritical response methods for on-line prediction flutter onset in wind tunnel tests conducted in the Langley Transonic Dynamics Tunnel [NASA-TH-83178] 0068 882-23240
Static half-span model support system [NASA-CASE-LAB-1244-1] 0037 882-23254
Wind-tunnel/flight-drag correlation [NASA-CP-2225] 0003 882-25198
Wind-tunnel/flight correlation program on XB-70 [NASA-TH-60065] 0004 882-25200
Problems in correlation caused by propulsion systems [NASA-TH-60065] 0004 882-25201
F-15 wind-tunnel/flight correlations [NASA-TH-60065] 0004 882-25203
Opportunities for wind-tunnel/flight correlation with new Boeing airplanes [NASA-TH-60065] 0004 882-25206
F-16E program overview and wind tunnel/flight correlation [NASA-TH-60065] 0004 882-25207
1-29A forward-swept-wing demonstrator airplane [NASA-TH-60065] 0004 882-25209
Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/flight-test correlation [NASA-TH-60065] 0004 882-25211
Elastic deformation effects on aerodynamic characteristics for a high-aspect-ratio supercritical-wing model [NASA-TH-60065] 0004 882-25214
Thrust-induced effects on low-speed aerodynamics of fighter aircraft --- Langley 4- by 7-meter tunnel [NASA-TH-83277] 0005 882-25218
Effects of wing-leading-edge modifications on a full-scale, low-wing general aviation airplane: Wind-tunnel investigation of high-angle-of-attack aerodynamic characteristics --- conducted in Langley 30- by 60-foot tunnel [NASA-TP-1311] 0046 882-26217
Aerodynamic interactions between a 1/6 scale helicopter rotor and a body of revolution [NASA-TH-84247] 0052 882-28252
Investigation of vortex between all-scale and fifth-scale wind tunnel tests of a Bell helicopter Propeller Model 222 [NASA-CP-166362] 0053 882-29315
Windtunnel capability related to test sections, cryogenics, and computer-windtunnel integration [AC-A-81738] 0052 882-29334
Forward velocity effects on fan noise and the suppression characteristics of advanced inlets as measured in the NASA Ames 40 by 80 foot wind tunnel [NASA-TR-15213] 0054 882-30030
Wind tunnel investigations on this supercritical airfoils in high subsonic flow [OPFLA-TH-62-06] 0057 882-30296
Supercritical wingtip evaluation of fighter configuration. Wind-tunnel investigation at Mach numbers of 0.60 to 0.95 [NASA-TR-45153] 0057 882-31303
On low-speed wind tunnels with deformable boundaries [NASA-TR-11662] 0062 882-11662
Three-dimensional flow studies on a slotted transonic wind tunnel wall [AOA-TH-79203] 0117 882-17055
Transonic wind tunnel wall interference corrections for three-dimensional models [AOA 82-0588] 0127 882-24663
Wind-tunnel wall interference corrections for three-dimensional flows [NASA-TR-45153] 0275 882-26182
Aerodynamic behavior of a slender slot in a wind tunnel wall with different length and wing settings --- aerodynamic drag measurement [NASA-TR-45153] 0275 882-26182
Aerodynamic behavior of a slender slot in a wind tunnel wall with different length and wing settings --- aerodynamic drag measurement [NASA-TR-45153] 0275 882-26182
Wind-tunnel testing of V/STOL configurations at high lift [NASA-TR-394] 0301 882-38261
Corrections for wall effects in ONERA industrial wind tunnels [NASA-TR-394] 0548 882-42010
The use of adaptive walls in plane flows [NASA-TR-394] 0548 882-42010
Higher-order flow angle corrections for three-dimensional wind tunnel wall interference [NASA-TR-394] 0555 882-44246
The pressure signature method for blockage, interference, and its applications to the industrial wind tunnel [NASA-TR-394] 0555 882-44246
Theoretical and experimental investigations of wind tunnel interference due to angle of attack [NASA-TR-74167] 0567 882-20192
A numerical investigation of two-dimensional, subsonic, linear, wind tunnel interference theory [NASA-TR-74167] 0302 882-21226
Tunnel-to-tunnel correlation [NASA-CP-2225] 0003 882-25196
Tunnel-to-tunnel correlation [NASA-CP-2225] 0003 882-25196
Tunnel-to-tunnel correlation [NASA-CP-2225] 0003 882-25196
Tunnel-to-tunnel correlation [NASA-CP-2225] 0003 882-25196
Tunnel-to-tunnel correlation [NASA-CP-2225] 0003 882-25196
Measuring the flow properties of slotted test-section walls [FPA-135] 0014 882-26189
Subject Index
Application of a transonic similarity rule to correct the effects of sidewall boundary layers in two-dimensional transonic wind tunnels. [NASA-TN-84807] p0594 A82-32384

WIND TUNNELS
HT BLOWDOWN WIND TUNNELS
HT CASCADE WIND TUNNELS
HT CRYPTOGENIC WIND TUNNELS
HT HYPERSONIC WIND TUNNELS
HT LOW SPEED WIND TUNNELS
HT PLASMA JET WIND TUNNELS
HT SHOCK TUNNELS
HT SLIDED WIND TUNNELS
HT SUBSONIC WIND TUNNELS
HT TRANSONIC WIND TUNNELS

Aerodynamics - Retrospect and prospect /The 21st
Lancaster Memorial Lecture/ p0275 A82-26098

Aerodynamical research and development
Owerre, Ed. No. 1961-90 p0387 A82-36114

Evaluating the acoustic measurement capability of the NASA Langley V/STOL wind tunnel open test section with acoustically absorbent ceiling and floor transition. [NASA-CR-165796] p0030 A82-10059


Calibration of the IFM anechoic Facility. Phase 1: Short range flight [NASA-TN-D81-9001] p0192 A82-16091

A versatile data acquisition system for a low speed wind tunnel [AD-A052625] p0192 A82-16097

Applications of a laser velocimeter in the Langley 4- by 7-meter tunnel p0598 A82-32693

Noise measurement in wind tunnels, workshop summary [NASA-TN-84219] p0614 A82-34188

WIND TURBINES
Darrieus rotor aerodynamics p0364 A82-33708

Methods for analysis of wind ripple in wind turbines [SAND-81-7006] p0306 A82-20193

Approach to the fatigue analysis of vertical-axis wind-turbine blades [DE82-003193] p0308 A82-20573

Yawing of wind turbines with blade cyclic-pitch variation [DE81-029639] p0461 A82-26822

Aerodynamic forces acting on the blades of stall regulated propeller type windmills [DE82-90178] p0573 A82-31718

WIND VARYERS
Programmable controller system for wind tunnel diversion vanes p0543 A82-41046

WIND VARIATIONS
Methods for analysis of wind ripple in wind turbines [SAND-81-7006] p0306 A82-20193

WIND VELOCITY

Sust front structure observed by Doppler radar [AD-1103866] p0094 A82-10223

The characteristics and detection of low level wind shear in the critical phases of flight p0257 A82-28349

Sudden changes in wind velocity - Their effect on aircraft and means of reducing hazard. I p0334 A82-29871

Wind determination and wind shear detection from flight test and airborne flight data p0579 A82-45515

On the aerodynamics of windblast [AD-A1104095] p0405 A82-25221

Computer enhanced analysis of a jet in a cross-stream p0539 A82-29555

WIND VELOCITY MEASUREMENT
The Joint Airport Weather Studies Project p0311 A82-21152

WINDING
HT FILAMENT WINDING
WINDING WINDMILLS
U AUTOROTATION
WINDMILLS (WINDPOWERED MACHINES)

Howard model for the verification of computational methods

[IS0-275] p0216 A82-17638

Static investigations of rotor blades under deadweight and during stationary operation [IS0-269] p0216 A82-17639

Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling [IS0-270] p0216 A82-17640

Dynamic analysis of a rotor blade with flap and lag freedom and flap-pitch coupling [IS0-271] p0216 A82-17641

Static and dynamic investigations for the model of a wind rotor [IS0-272] p0216 A82-17642

An extension of the local moment theory to the rotors operating in twisted flow field p0245 A82-18123

Modal characteristics of rotor blades: Finite element approach and measurement by ground vibration test p0245 A82-18127

WINDSHELLS (APERTURES)
Algorithms for an adaptive dynamic window in electronic map systems p0271 A82-14679

Fall scale test facilities for radomes and antenna windows p0281 A82-26667

WINDPOWER UTILIZATION
Biennial Wind Energy Conference and Workshop, 5th, Washington, DC, October 5-7, 1981, Proceedings p0303 A82-33701

WINDPOWERED GENERATORS
German-Argentine experiment: Vertical-rotor wind engine p0091 A82-12468

Loading cycles and material data for the layout of a wind turbine of special hub concept [IS0-273] p0215 A82-17643

Methods for analysis of wind ripple in wind turbines [SAND-81-7006] p0306 A82-20193

User's manual for the vertical axis wind turbine code VDAB72 [DE82-000756] p0461 A82-26828

WINDSCREENS
U WINDSHIELDS
WINDSHIELDS
Design analysis of high temperature transparent windshields for high performance aircraft [AEREP PAPER 81-E可知,具体可参考相关文献。] p0011 A82-10893


Transparency development needs for military aircraft in the 1980's p0225 A82-24302

Deficiencies and constraints that affect the design of cockpit enclosures and transparencies p0226 A82-24303

Fuel-efficient windshields for transport, commuter and business aircraft p0226 A82-24304

Transparencies - What an aircraft designer should know p0226 A82-24305

Aircraft transparency design guide p0226 A82-24307

A new angular deviation measurement device for aircraft transparencies p0226 A82-24308

Proposed method for abrasion testing transparent plastics and coatings p0227 A82-24311

Washboard system structural enhancement p0227 A82-24312

The role of finite element analysis in the design of birdstrike resistant transparencies p0227 A82-24313

The development of high strength lightweight windshields for the new generation of Boeing 757 and 767 airliners p0228 A82-24323

D.C.9 windshield - Effect of attachment torque p0228 A82-24324

B.A.C. One-Eleven flight deck glazing product improvement p0228 A82-24325

Concorde glazings - 5 years of sach A service p0228 A82-24326
A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory

Experimental trim drag values for conventional and supercritical wings

Aerodynamic noise generated by jet wing/flare interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using FJ2710 turboshaft engine

Experimental flight test programs for improving combat aircraft maneuverability by means of flaps and pylons flaps

Aerodynamic noise generated by jet wing/flare interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using FJ2710 turboshaft engine

Increasing the lift-to-drag ratio of a flat delta wing

Airfoil design for light transport aircraft with improved fuel economy

The NASA Langley laminar flow control airfoil experiment

Nonlinear prediction of subsonic aerodynamic loads on wings and bodies at high angles of attack

On the question of trailing airplane motion

Divergence of a sweptforward wing

Investigation of the stream-strain state of a rectangular wing section of variable thickness under concentrated loads and heating

Wing-canard aerodynamics at transonic speeds - Fundamental considerations on maximum drag spanloads

Structural modeling of high Reynolds number wind tunnel models

Development of a preloaded hybrid advanced composite wing design

Instability effects on pylons and engine loading in an aircraft with high-aspect-ratio wings

Investigation of the unsteady airloads on a transport aircraft type airfoil with two interchangeable oscillating trailing edge flaps, at transonic speed and high Reynolds numbers

The design integration of wingtip devices for light general aviation aircraft

Operation VIFDR - Development of a composite material wing

A crack growth model under spectrum loading

Test results of chordwise and spanwise blowing for low-speed lift augmentation

Maximum induced drag of canard configurations

The design of airfoil profiles with trailing edge loading in transonic flow - French thesis

On the question of trailing airplane motion

The design integration of wingtip devices for light general aviation aircraft

The NASA Langley laminar flow control airfoil experiment

The NASA Langley laminar flow control airfoil experiment

The NASA Langley laminar flow control airfoil experiment

Increasing the lift-to-drag ratio of a flat delta wing

Airfoil design for light transport aircraft with improved fuel economy

The NASA Langley laminar flow control airfoil experiment

Increasing the lift-to-drag ratio of a flat delta wing

Airfoil design for light transport aircraft with improved fuel economy

The NASA Langley laminar flow control airfoil experiment

The NASA Langley laminar flow control airfoil experiment

Increasing the lift-to-drag ratio of a flat delta wing

Airfoil design for light transport aircraft with improved fuel economy

The NASA Langley laminar flow control airfoil experiment

Increasing the lift-to-drag ratio of a flat delta wing

Airfoil design for light transport aircraft with improved fuel economy

The NASA Langley laminar flow control airfoil experiment
Responses of oscillating wings in weak shear flow
Torsional vibrations of a wing carrying a
concentrated load / asymptotic behavior/
A simplified wing procedure in connection with the
lifting line theory and the doublet-lattice method
The velocity potential for the harmonically
oscillating, rectangular wing with meaninfinite
span in nonlinear theory
Unsteady lifting-line theory with applications
[NUA PAPERS 82-0354]
Flow field around an oscillating airfoil
Numerical calculation of lift, moment coefficient
and dynamic stability derivatives on
sidelipping wings in unsteady supersonic flows
Oscillating supersonic/hypersonic wings at high
incidence
Recent developments in wing with stores flutter
suppression
[ODEA, TP 80. 1981-145]
Results of recent measurements on an oscillating
aerofoil
Unsteady response of rectangular wings in spanwise
uniform shear flow
Wing/control surface flutter analyses using
experimentally corrected aerodynamics
Experimental study of oscillating-wing propulsion
Test demonstration of digital control of
wing/store flutter
[AAIA 82-0665]
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9
Comparison between computations and experimental
data on unsteady three-dimensional transonic
aerodynamics, including aerelastic applications
[AAIA 82-0690]
Transonic flutter study of a wind-tunnel model of
a supercritical wing with/without winglet
[AAIA 82-0721]
Feedback control of a cantilever wing in steady
airflow
[AAIA 82-0729]
Fundamental torsional frequency of a class of
solid wings
On the torsional modes of a uniformly tapered
solid wing
Dynamic load measurements with delta wings
undergoing self-induced roll-oscillations
[AAIA PAPERS 82-1220]
Theoretical and experimental investigation of
joint-structural damping interaction for
airplane construction
Sensitivity analysis and optimization of
aerelastic stability
Transonic flutter and response analyses of two
3-degree-of-freedom airfoils
Choice of weight coefficients in the problem of
the optimal damping of the elastic oscillations of
a wing
The effect of a screen on the aerodynamic
characteristics of an oscillating profile
Aerelasticity patterns: Some reflections on two
decades of testing in the NASA Langley transonic
dynamics tunnel
[LIGA-TR-62-1210]
Lifting surface theory for wings in low frequency
small amplitude yawing and side slipping
oscillating motions at low speeds
A theoretical investigation of wing rocking
[LUIA-CE-62-0050]
Application of the ONERA dynamic stall model to a
helicopter blade in forward flight
Pressure measurements on a wing oscillating in
supercritical flow
Application of modal synthesis techniques for the
dynamic qualification of wings with stores
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9 —
conducted in the Langley Transonic Dynamics Tunnel
Application of modal control to wing-flutter
suppression
Dynamic load measurements with delta wings
undergoing small amplitude yawing and side slipping
oscillating motions at low speeds
A simplified wing procedure in connection with the
lifting line theory and the doublet-lattice method
The velocity potential for the harmonically
oscillating, rectangular wing with meaninfinite
span in nonlinear theory
Unsteady lifting-line theory with applications
[AAIA PAPERS 82-0354]
Flow field around an oscillating airfoil
Numerical calculation of lift, moment coefficient
and dynamic stability derivatives on
sidelipping wings in unsteady supersonic flows
Oscillating supersonic/hypersonic wings at high
incidence
Recent developments in wing with stores flutter
suppression
[ODEA, TP 80. 1981-145]
Results of recent measurements on an oscillating
aerofoil
Unsteady response of rectangular wings in spanwise
uniform shear flow
Wing/control surface flutter analyses using
experimentally corrected aerodynamics
Experimental study of oscillating-wing propulsion
Test demonstration of digital control of
wing/store flutter
[AAIA 82-0665]
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9
Comparison between computations and experimental
data on unsteady three-dimensional transonic
aerodynamics, including aerelastic applications
[AAIA 82-0690]
Transonic flutter study of a wind-tunnel model of
a supercritical wing with/without winglet
[AAIA 82-0721]
Feedback control of a cantilever wing in steady
airflow
[AAIA 82-0729]
Fundamental torsional frequency of a class of
solid wings
On the torsional modes of a uniformly tapered
solid wing
Dynamic load measurements with delta wings
undergoing self-induced roll-oscillations
[AAIA PAPERS 82-1220]
Theoretical and experimental investigation of
joint-structural damping interaction for
airplane construction
Sensitivity analysis and optimization of
aerelastic stability
Transonic flutter and response analyses of two
3-degree-of-freedom airfoils
Choice of weight coefficients in the problem of
the optimal damping of the elastic oscillations of
a wing
The effect of a screen on the aerodynamic
characteristics of an oscillating profile
Aerelasticity patterns: Some reflections on two
decades of testing in the NASA Langley transonic
dynamics tunnel
[LIGA-TR-62-1210]
Lifting surface theory for wings in low frequency
small amplitude yawing and side slipping
oscillating motions at low speeds
A theoretical investigation of wing rocking
[LUIA-CE-62-0050]
Application of the ONERA dynamic stall model to a
helicopter blade in forward flight
Pressure measurements on a wing oscillating in
supercritical flow
Application of modal synthesis techniques for the
dynamic qualification of wings with stores
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9 —
conducted in the Langley Transonic Dynamics Tunnel
Application of modal control to wing-flutter
suppression
Dynamic load measurements with delta wings
undergoing small amplitude yawing and side slipping
oscillating motions at low speeds
A simplified wing procedure in connection with the
lifting line theory and the doublet-lattice method
The velocity potential for the harmonically
oscillating, rectangular wing with meaninfinite
span in nonlinear theory
Unsteady lifting-line theory with applications
[AAIA PAPERS 82-0354]
Flow field around an oscillating airfoil
Numerical calculation of lift, moment coefficient
and dynamic stability derivatives on
sidelipping wings in unsteady supersonic flows
Oscillating supersonic/hypersonic wings at high
incidence
Recent developments in wing with stores flutter
suppression
[ODEA, TP 80. 1981-145]
Results of recent measurements on an oscillating
aerofoil
Unsteady response of rectangular wings in spanwise
uniform shear flow
Wing/control surface flutter analyses using
experimentally corrected aerodynamics
Experimental study of oscillating-wing propulsion
Test demonstration of digital control of
wing/store flutter
[AAIA 82-0665]
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9
Comparison between computations and experimental
data on unsteady three-dimensional transonic
aerodynamics, including aerelastic applications
[AAIA 82-0690]
Transonic flutter study of a wind-tunnel model of
a supercritical wing with/without winglet
[AAIA 82-0721]
Feedback control of a cantilever wing in steady
airflow
[AAIA 82-0729]
Fundamental torsional frequency of a class of
solid wings
On the torsional modes of a uniformly tapered
solid wing
Dynamic load measurements with delta wings
undergoing self-induced roll-oscillations
[AAIA PAPERS 82-1220]
Theoretical and experimental investigation of
joint-structural damping interaction for
airplane construction
Sensitivity analysis and optimization of
aerelastic stability
Transonic flutter and response analyses of two
3-degree-of-freedom airfoils
Choice of weight coefficients in the problem of
the optimal damping of the elastic oscillations of
a wing
The effect of a screen on the aerodynamic
characteristics of an oscillating profile
Aerelasticity patterns: Some reflections on two
decades of testing in the NASA Langley transonic
dynamics tunnel
[LIGA-TR-62-1210]
Lifting surface theory for wings in low frequency
small amplitude yawing and side slipping
oscillating motions at low speeds
A theoretical investigation of wing rocking
[LUIA-CE-62-0050]
Application of the ONERA dynamic stall model to a
helicopter blade in forward flight
Pressure measurements on a wing oscillating in
supercritical flow
Application of modal synthesis techniques for the
dynamic qualification of wings with stores
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9 —
conducted in the Langley Transonic Dynamics Tunnel
Application of modal control to wing-flutter
suppression
Dynamic load measurements with delta wings
undergoing small amplitude yawing and side slipping
oscillating motions at low speeds
A simplified wing procedure in connection with the
lifting line theory and the doublet-lattice method
The velocity potential for the harmonically
oscillating, rectangular wing with meaninfinite
span in nonlinear theory
Unsteady lifting-line theory with applications
[AAIA PAPERS 82-0354]
Flow field around an oscillating airfoil
Numerical calculation of lift, moment coefficient
and dynamic stability derivatives on
sidelipping wings in unsteady supersonic flows
Oscillating supersonic/hypersonic wings at high
incidence
Recent developments in wing with stores flutter
suppression
[ODEA, TP 80. 1981-145]
Results of recent measurements on an oscillating
aerofoil
Unsteady response of rectangular wings in spanwise
uniform shear flow
Wing/control surface flutter analyses using
experimentally corrected aerodynamics
Experimental study of oscillating-wing propulsion
Test demonstration of digital control of
wing/store flutter
[AAIA 82-0665]
Static and unsteady pressure measurements on a 50
degree clipped delta wing at M = 0.9
Comparison between computations and experimental
data on unsteady three-dimensional transonic
aerodynamics, including aerelastic applications
[AAIA 82-0690]
Transonic flutter study of a wind-tunnel model of
a supercritical wing with/without winglet
[AAIA 82-0721]
Feedback control of a cantilever wing in steady
airflow
[AAIA 82-0729]
Fundamental torsional frequency of a class of
solid wings
On the torsional modes of a uniformly tapered
solid wing
Dynamic load measurements with delta wings
undergoing self-induced roll-oscillations
[AAIA PAPERS 82-1220]
Theoretical and experimental investigation of
joint-structural damping interaction for
airplane construction
Sensitivity analysis and optimization of
aerelastic stability
Transonic flutter and response analyses of two
3-degree-of-freedom airfoils
Choice of weight coefficients in the problem of
the optimal damping of the elastic oscillations of
a wing
The effect of a screen on the aerodynamic
characteristics of an oscillating profile
Aerelasticity patterns: Some reflections on two
decades of testing in the NASA Langley transonic
dynamics tunnel
[LIGA-TR-62-1210]
Lifting surface theory for wings in low frequency
small amplitude yawing and side slipping
oscillating motions at low speeds
A theoretical investigation of wing rocking
[LUIA-CE-62-0050]
SUBJECT INDEX

[AIAA 82-0645] p0337 A82-30141
Wing tunnel studies of store separation with load factor - Freedrops and captive trajectories

[AIAA 82-2654] p0283 A82-26541
Self-tuning regulator design for adaptive control of aircraft wing/store flutter

[AIAA 82-0645] p0337 A82-30141
Two-dimensional apparent masses for cross-flow sections of wing-store configurations

[AIAA 82-0645] p0337 A82-30141
Wing tunnel studies of store separation with load factor. Freedrops and captive trajectories

WINGED VEHICLES

In-flight deflection measurement of the HAT aerodynamically tailored wing

[AIAA PAPER 81-2650] p0063 A82-14381
Winglets

Aerodynamic evaluation of winglets for transport aircraft

[AIAA PAPER 81-1215] p0106 A82-22245
Transonic flutter study of a wind-tunnel model of a supercritical wing with/without winglet

[AIAA 82-0721] p0340 A82-30171
The design integration of wingtip devices for light general aviation aircraft

[AIAA 82-0721] p0340 A82-30171
Transonic flutter study of a wind-tunnel model of a supercritical wing with/without winglet

Conducted in Langley Transonic Dynamics Tunnel

NASA-TR-03279] p0368 A82-23239
Selected winglet and mixed flow long duct nacelle development for DC-10 derivative aircraft

[AIAA-CH-3296] p0589 A82-32247
Application of an optimized winglet configuration to an advanced commercial transport

[AIAA-CH-159156] p0589 A82-32348
WINGS

NT AERIAL WINGS
NT BEARINGLESS BORS
NT CAMBERED WINGS
NT CANT WINGS
NT DELTA WINGS
NT FIXED WINGS
NT FLEXIBLE WINGS
NT INFINITE SPAN WINGS
NT LIFTING BORS
NT LOW ASPECT RATIO WINGS
NT OBELIQUE WINGS
NT PARABRINGS
NT RECTANGULAR WINGS
NT RIGID BORS
NT RIGID WINGS
NT ROTARY BORS
NT SLENDER WINGS
NT SQUAROCUTICAL WINGS
NT SPLIT FORWARD WINGS
NT SPLIT WINGS
NT SPLITBACK WINGS
NT TWIN WINGS
NT TILTING BORS
NT TRAPEZIODAL WINGS
NT TWISTED WINGS
NT UNSCRIPT WINGS
NT VARIABLE SLEEP WINGS

Angle of downwash behind a wing in unsteady flow

[AIAA-TR-26970] p0261 A82-26970
Structural design and construction of the New Technology Wing

[AIAA-TR-2654] p0283 A82-2654
Experimental program for general aviation - wing design, construction and flight testing

[p0283 A82-26542
One year flight testing of the Transonic Wing

[AIAA-TR-2658] p0283 A82-26543
Fracture control in ballistic-damaged graphite/epoxy wing structure

[AIAA-TR-26539] p0284 A82-26539
Durability evaluation of highly stressed wing box structure

[AIAA-TR-27163] p0290 A82-27163
Design considerations and experiences in the use of composite material for an aerelastic research wing

[AIAA 82-2657] p0338 A82-30146
The equivalent simple body /SBN/ method for transonic wing analysis

[AIAA PAPER 82-0936] p0374 A82-31923
Design of finite element grids for the computation of the three-dimensional transonic flow around a wing

[AIAA PAPER 82-1019] p0375 A82-31972
Multibody transport concept

[AIAA PAPER 82-0810] p0376 A82-31983
Application of computational methods to transonic airfoil design

A-7 transonic wing designs

Application of full potential flow methods for the design and analysis of transport aircraft wings

A study of wing vorticity patterns

Prediction of fatigue crack propagation in plane specimens and thin-walled structural elements of aircraft wing skins under program load

[AIAA-CH-164952] p0584 A82-47229
Aircraft wing trailing-edge noise

On the kernel function collocation method in steady subsonic flow for wing with control surfaces

Calculation of wing-body-nacelle interference in subsonic and transonic potential flow

Prediction of aerodynamic loads on aircrafts with external stores at transonic speeds

Integration of a code for aeroelastic design of conventional and composite wings into ACSINT, an aircraft synthesis program - wing aeroelastic design (NADC)

[AIAA-CH-137605] p0189 A82-16069
Theory and experiment in unsteady aerodynamics

[AIAA-TR-80046-6] p0199 A82-17128
Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing

[AIAA-TR-107727] p0199 A82-17128
NIPPA-12A diagnostic and development programs

[AIAA-TR-108354] p0254 A82-18206
Numerical aircraft design using 3-D transonic analysis with optimization. Volume I: Executive summary

[AIAA-TR-101035] p0314 A82-21180
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 2: Part I: Transport design

[AIAA-TR-102231] p0315 A82-21180
Some remarks on buffetting - - - of wings, wind tunnel models

[AIAA-TR-07055-1580] p0319 A82-21216
Investigation of passive shock wave-boundary layer control for transonic airfoildrag reduction

[AIAA-TR-6118064] p0349 A82-22209
Experiment on active flutter suppression of a cantilever wing

[BAL-TR-690] p0356 A82-22282
Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings

[AIAA-TR-6118064] p0361 A82-23193
Means for controlling aerodynamically induced tension

[AIAA-TR-120-12175-1] p0523 A82-23879
Aerodynamics of an airfoil with a jet issuing from its surface

[AIAA-TR-804825] p0531 A82-29267
An effective algorithm for shock-free wing design

[MI-146265] p0569 A82-31322
Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing

[AIAA-CH-159202] p0586 A82-32319
Flight simulation consoles, aid or obstruction - Pilot/vehicle model analysis of visual and motion
Cockpit display of traffic information and the
Electronic master monitor and advisory display
Combined multisensor displays — airborne
Assessing pilot workload — without disturbing
The work environment
Efficient use of working fluids in aviation
 hydraulic systems
Assessing pilot workload — without disturbing
Flight simulation consoles, aid or obstruction —
Objective evaluation of control consoles of
modern flight and tactics simulators
Combined multisensor displays — image
 preprocessing for shape coding to reduce pilot
workload
Utilizing the helicopter’s versatility to improve
the ATC system
Boeing’s new 767 cabin crew workload
Electronic master monitor and advisory display
system, operational functions report
Update of the summary report of 1977–1978 task
Force on airplane workload
Real-time simulation of an airborne radar for
overwater approaches
Cockpit display of traffic information and the
measurement of pilot workload: An annotated
bibliography
Special investigation report: Air traffic control
system
Pilot/vehicle model analysis of visual and motion
cue requirements in flight simulation
X
X BAND
X BAND ASTROMONY
Construction and testing of an Omega navigation
system for the balloon-borne X-ray experiment
German thesis
X BAND INSPECTION
Determination of material properties by limited
scan X-ray tomography
X BAND SPECTROGRAPHY
X BAND SPECTROGRAPHY
X BAND SPECTROGRAPHY
Techniques suitable for a portable wear metal
analyzer
<table>
<thead>
<tr>
<th>Subject Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>X WING ROTORS</td>
</tr>
<tr>
<td>Advanced helicopter concepts compete</td>
</tr>
<tr>
<td>X-wing and the Navy V/STOL initiative</td>
</tr>
<tr>
<td>An X-Wing aircraft control system concept</td>
</tr>
</tbody>
</table>
| An investigation of a stoppable helicopter rotor with circulation control — axes 40 by 80 foot
wind tunnel |
| Development of low-order model of an X-wing aircraft by system identification |

| X-14 AIRCRAFT |
| The X-14 – 24 years of V/STOL flight testing |

| X-70 AIRCRAFT |
| X-70 AIRCRAFT |

| X-79-DR-1 ENGINE |
| X-79 ENGINE |

| X-111 AIRCRAFT |
| A study of the suitability of the all fiberglass
V/STOL aircraft for fuel efficient general
aviation flight research |

| X-15 AIRCRAFT |
| Hover tests of the X-15 Tilt Rotor Research Aircraft |
| Advanced technology airfoil development for the
X-15 tilt-rotor vehicle |
| Flexibility is offered by XV-15 tilt-rotor concept |
| XV-15 – Foretelling things to come |

| X-15 program update |
| Simulation of the XV-15 tilt rotor research aircraft |
| Advanced technology airfoil development and the
X-15 tilt-rotor vehicle |
| Flexibility is offered by XV-15 tilt-rotor concept |
| XV-15 – Foretelling things to come |

| X-40 AIRCRAFT |
| The powerplants of the Yak-40 and 8-15 aircraft |

| X-50 AIRCRAFT |

| X-50 AIRCRAFT |

| X-50 AIRCRAFT |

| YAG LASERS |
| Options for GTE precision automated tracking system — airborne laser tracking system |

| YAK 40 AIRCRAFT |
| The powerplants of the Yak-40 and 8-15 aircraft — Russian book |

| YAW |
| An analysis of a nonlinear instability in the
implementation of a V/STOL control system during
glider tests |
| An analysis of a nonlinear instability in the
implementation of a V/STOL control system during
glider tests |

| YAWING MOMENTS |
| Jet effects on forces and moments of a VSTOL
tiltrotor type aircraft |
| yawing of wind turbines with blade cyclic-pitch
variation |

| A-480 |
SUBJECT INDEX

[DESI-029639] p0461 A82-26822

ATTITUDE INDICATORS
U TAV
U HU-1 HELICOPTER

YIELD POINT
A multidimensional-crack-growth prediction
methodology for flaws originating at fastener
holes
p0327 A82-28932

YIELD STRENGTH
On the bearing strengths of CFP lamintes
p0496 A82-39930

YJ-79 ENGINE
U J-79 ENGINE
U J-85 ENGINE
U J-85 ENGINE

YOUNG MODULUS
U MODULUS OF ELASTICITY

FT-2 AIRCRAFT
U FT-2 AIRCRAFT

TUR-1 HELICOPTER
U TUR-1 HELICOPTER
U TUR-60A HELICOPTER
U SH-60A HELICOPTER

ZERO GRAVITY
U WEIGHTLESSNESS

ZONES
U REGIONS
PERSONAL AUTHOR INDEX

AERONAUTICAL ENGINEERING / a continuing bibliography

1982 Cumulative Index

Typical Personal Author Index Listing

JANUARY 1983

PERSONAL AUTHOR

ABBE, J. J.
Trends in airline avionics
[ELR-SP-0013-U] p0256 882-34220

ABBB, J. M.
Analysis of F/STOL inlet analysis methods
[NASA-TP-82699] p0256 882-34221

Abbot, J. B.
A summary of V/SIOL inlet analysis methods
[HASA-IP-2010] p0046 882-13120

ABBOTT, I. B.
Ice phobias blade tracking and comparison of vibration analysis techniques
[AD-A108121] p0189 882-26074

ABBB, K. I.
TF34 Convertible Engine System Technology Program
[AD-A10897] p0690 882-26703

ABBBAB, M.
Effects of fan inlet temperature disturbances on the stability of a transport engine
[NASA-TP-82699] p0256 882-34222

ABS, L.
Evaluation of CEPB prototype structures for aircraft
[AD-A10897] p0690 882-34223

ABBE, L.
Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls
[AD-A10897] p0690 882-26226

ABEL, J. B.
The Sortie-Generation Model system. Volume 1: Executive summary
[AD-110090] p0647 882-26222

The Sortie-Generation Model system. Volume 2: Sortie-Generation Model users's guide
[AD-110090] p0647 882-26223

The Sortie-Generation Model system. Volume 3: Sortie-Generation Model programmers manual
[AD-110090] p0647 882-26224

The Sortie-Generation Model system. Volume 4: Spacesubsystem
[AD-110090] p0647 882-26226

ABELL, L. E.
The toll of IIS-preventable aviation accidents
[AD-A10897] p0242 882-25325

ABELSON, P. W.
Costs of noise nuisance from aircraft
[AD-A10897] p0046 882-13120

ABBEY, R. E.
Transonic perturbation analysis of wing-fuselage-nozzle-pylon configurations with powered jet exhausts
[AIAA PAPBB 82-0325] p0184 882-22077

ABALL, R. G.
Determining hinge moment and spanwise airloads parameters from flight data for Learjet airplanes
[AD-A10897] p0046 882-20180

ABALL, R. G.
Determination of Learjet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data
[AIAA PAPBB 82-0416] p0116 882-20180

ABBB, V. S.
Proposed multipurpose flying radio-physical laboratory using an IL-16 aircraft
[AD-A10897] p0550 882-21278

ABBB, C. R.
A design criterion for highly augmented fly-by-wire aircraft
[AIAA 82-1570] p0485 882-38969

ABBB, L. B.
Results of a Differential Omega experiment
[AD-110090] p0122 882-26703

DIFFERENTIAL OMEGA SYSTEM DEVELOPMENT AND EVALUATION
[AD-110090] p0200 882-26704

ABBB, M.
Correlation of Preston-tube data with laminar skin friction (Log No. J1280)
[NASA-TP-82427] p0539 882-29556

ACCCARINO, I.
A new approach to radar plot extraction for AAC applications
[AD-A10897] p0075 882-21908

ACCEPHABER, J.
Robust flight control - A design example
[AD-A10897] p0082 882-15845

ACQUEAWE, J. M.
Mechanical wear assessment of helicopter engines by ferrography
[AD-110772] p0454 882-26305

ACCHERI, C. M., JR.
Performance of the Rotor Systems Research Aircraft calibrated rotor loads measurement system
[AD-A10897] p0592 882-20534

ADAC, L.
On the numerical analysis of stall flutter in engine cascades
[AD-A10897] p0143 882-15054

ADAC, C. F.
Climatic laboratory evaluation YC-47D helicopter
[AD-115681] p0590 882-32355

ADAN, R. C.
P/F-18 'Hornet' - One man operability
[AIAA 81-2266] p0048 882-13348

P/F-18 Hornet crew station
[AD-11036] p0093 882-13064

ADAK, V.
A concept for 4D-guidance of transport aircraft in the FAA
[AD-A10897] p0509 882-20962

Control law design for transport aircraft flight
tasks
[AD-A10897] p0339 882-11080

Integration of a digital air data computer into the test aircraft HSF-320
[OPHIS-81-09] p0141 882-15038

ADOK, L.
Charting propulsion's future - The AES results
[AIAA PAPBB 82-1139] p0417 882-35023

ADOK, R. L.
Initial functional description of integrated flow management
[AD-A10897] p0313 882-21171

ADOK, J. J.
Simulator study of a pictorial display for general aviation instrument flight
[NASA-TP-82699] p0304 882-20780

Flight-test verification of a pictorial display for general aviation instrument flight
[AD-A10897] p0304 882-20180

B-1
Engine dynamic analysis with general nonlinear finite element codes. IX - Bearing element implementation, overall numerical characteristics and benchmarking.


Type '4' STOL - One aircraft for all support missions.

Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance (BPCS) test phase.

Problems related to the integration of fault tolerant aircraft electronic systems.

The Air Force Flight Test Center - Utah Test and Training Range in the 1980's.

Application of the sequential optimization method to the tuning of the natural frequencies of gas-turbine engine compressor blades.

Instruments and installations for meteorological measurements at airports.

Current aerial antennas.

Where is cobalt irreplaceable?

Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing.

Pavement management and rehabilitation of Portland cement concrete pavements.

Weapon delivery system using GPS.

Basic problems of aircraft gasturbine engine analytic design. II.

Calculations of transonic steady state aerelastic effects for a canard airplane.

The military flying qualities specification, a help or a hindrance to good fighter design.

Collection and evaluation of propeller aircraft noise certification data.

Mechanical property characterization and modeling of structural materials.

Unsteady lifting-base theory with applications.
Techniques suitable for a portable wear metal collection and evaluation of propeller aircraft. Optimization of measurements in the state of the art. Integration of avionics and advanced control technology.

Application of computer generated color graphic techniques to the processing and display of threedimensional fluid dynamic data.
A roadmap toward a fatigue qualification process for modern technology helicopters

ABEYU, E. M.
Test site instrumentation study. Volume 2: Crash 1 and crash 2 raw data

ABETS, L. J.
Software considerations in the design of computer generated flight displays

ABEIEL, J. H.
Rotor model for the verification of computational methods

ABBATTI, J. B.
Static investigations of rotor blades under deadweight and during stationary operation

ABBA, K.
Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling

ABBEY, N.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
The application of large screen CBT's, touch panels, and voice to the flight stations of the F-16 Centralized Data System /CDS/

ABBEY, N.
Dynamic analysis of a rotor blade with flap and lag freedoms and flap-pitch coupling

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
demonstration of ceramic hot-section static test site instrumentation study. Volume 2: Crash 1 raw data

ABBED, J. B.
Components in a radial flow turbine

ABBED, J. B.
Dynamic investigations for the model of a wind rotor

ABBED, J. B.
Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling

ABBED, J. B.
Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling

ABBED, J. B.
Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling

ABBED, J. B.
Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon

ABBED, J. B.
The effect of inlet distortion on the performance of a centrifugal compressor

ABBED, J. B.
On the performance prediction of a centrifugal compressor scaled up

ABBED, J. B.
Static and dynamic investigations for the model of a wind rotor

ABBED, J. B.
Loading cycles and material data for the layout of a wind turbine of special hub concept

ABBED, J. B.
The behavior of composite thin-walled structures in dynamic buckling under impact

ABBED, J. B.
Jet fuel from carbon
ASCHENBACH, J. M.

Reducing reflections on the front surface of air traffic control displays... 0219 A82-23314

ASCHENBACH, J. M.

Mechanical property characterization and modeling of structural materials... 0219 A82-23314

ASHBAUGH, R. L.

Helicopter reliability and maintainability trends during development and production... 0219 A82-23314

ASHBY, R. J.

A solution to the static geometry problem for FJDS relative navigation... 0219 A82-12634

ASHKENESE, L. L.

Development of a tentative flying qualities criteria for aircraft with independent control of six degrees of freedom: Analysis and flight test... 0219 A82-22191

ASK, H. R.

Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)... 0219 A82-22191

AST, E. G.

Advanced display systems for crew stations of tactical aircraft... 0219 A82-13514

ASTLEII, L.

Porosity of INCONEL alloy 8A956 -- An oxide dispersion strengthened sheet alloy... 0219 A82-33994

ATASII, R.

Stability and flutter analysis of turbine blades at low speed... 0219 A82-15050

ATWOOD, R. L.

Speech Command Auditory Display System (SCADS)... 0219 A82-33867

ATWOOD, C. E.

Comparison of acoustic data from a 102 mm conic mobile as measured in the NASA 24-foot wind tunnel and the NASA Ames 40- by 80-Foot wind tunnel... 0219 A82-33867

AYRES, H.

Control optimization, stabilization and computer algorithms for aircraft applications... 0219 A82-27009

AYRES, H.

Real time estimation and prediction of ship motions using Kalman filtering techniques... 0219 A82-27009

AVERY, J. M.

Fracture control in ballistic-damaged graphite/epoxy wing structure... 0219 A82-17160

AYRES, R.

Utility of a probability-density-function curve and F-maps in composite-material inspection... 0219 A82-28934

AYRES, G.

Casing treatments on a supersonic diffuser for high pressure ratio centrifugal compressors... 0219 A82-35311

AYERS, J. M.

Preliminary experiments on a centrifugal research compressor using a laser -2- focus velocimeter... 0219 A82-43756

AYERS, J. M.

Experience with high performance V/STOL fighter projects at BBS... 0219 A82-19015

AYERS, J. M.

Experience with high performance V/STOL fighter projects at BBS... 0219 A82-19015

AAGOUT, E.

The use of adaptive control for helicopter trajectories in search operations... 0219 A82-19065

AARON, T.

The relative motion of a particle in the case of exponential changes of the velocity of the medium... 0219 A82-26479

AAGOUT, E.

Unsteady flow patterns associated with spoiler control devices... 0219 A82-17798

AAGOUT, E.

The use of adaptive control for helicopter trajectories in search operations... 0219 A82-19065

AARON, T.

Zone loading of flight-vehicle structures... 0219 A82-29838

AARON, T.

The relative motion of a particle in the case of exponential changes of the velocity of the medium... 0219 A82-26479

AAGOUT, E.

An extension of the local momentum theory to the rotors operating in twisted flow field... 0219 A82-18157

AAGOUT, E.

Balancing of flexible rotors by the complex modal method... 0219 A82-19310

AAGOUT, E.

A numerical approach to co-axial rotor aerodynamics... 0219 A82-18157
BANASUBRAMANIAN, C.

BANASUBRAMANIAN, C.
Calculation of the flow-field velocities of a wing-body-stores combination in transonic flow
[AIAA Paper 82-0956] p0034 882-21934

BANKER, H. L.
Control of electromechanical actuator elements for flight vehicles
p0920 882-12170

BALL, E. E.
Structures and dynamics division research and technology plans, FY 1982
[NASA-TP-84050] p0561 882-30566

BALL, A. D.
Study of the load-carrying capacity of aviation gas-turbine engine impellers under low-cycle loading at normal and high temperatures
p0081 882-15462

BALKER, H.
Maneuver load control for the reduction of damage loads and improvement of the maneuverability of modern fighter aircraft

BALKER, R. H.
Properties of the new flight and tactics simulators
[DOER PAPER 81-106] p0158 882-19265
Procurement of the new flight and tactics simulators - Experience, problems, meaning
[DOER PAPER 81-095] p0159 882-19266

BALKER, H. N.
The Helicopter Ride Revolution
[ANS PREPRINT 81-6] p0441 882-37780

BALKER, M. H.
Checking and calibrating variometers in place in the global instrument panel
p0330 882-29415

BALKER, W. F.
Attack and en route avionics for in-flight operations
p0471 882-27300

BALLARD, R. M.
The Maneuverable Atmospheric Probe (MAP), a remotely piloted vehicle
[AD-A161411] p0569 882-31323

BALLARD, J. D.
An investigation of a stoppable helicopter rotor with circulation control
[NASA-TJ-81216] p0026 882-10030

BALLARD, R. A.
Computational aerodynamics and design
[NASA-TG-84257] p0605 882-33246

BALLARD, R. A.
An experimental study of the effect of tail configuration on the spinning characteristics of general aviation aircraft

BALLARD, J. M.
Rudder wake characteristics relevant to rotor-stator interaction noise generation
[AIAA Paper 81-2031] p0008 882-10456

BALLARD, R. A.
Identification of the form of motion of an aircraft
p0373 882-31624

BAND, A. S.
Design and analysis of a multivariable control system for a CFP-type fighter aircraft
[AIAA PAPER 82-1356] p0088 882-39121
Analysis of flight data in the frequency domain
p0543 882-41796

BANDEAK, D.
The M-64A composite flexible tail rotor
p0278 882-26386

BANG, C.
Overview of flight and ground testing with emphasis on the wind tunnel
[AIAA Paper 81-2474] p0058 882-13928

BANERJEE, D.
ADVST - realistic not futuristic
p0294 882-27897

BANERJEE, D. W.
Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[AIAA PAPER 81-2612] p0155 882-19203
Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[NASA-TF-83327] p0405 882-25216

BARTHELL, J. A.
Problems related to the integration of fault tolerant aircraft electronic systems
[NASA-CP-165926] p0530 882-29022

BARTHEL, J. A.
A practical approach to the incorporation of technical advances in avionics
p0504 882-40086

BARGE, C.
Performance analysis of the test results on a two-stage transonic fan
[AIAA Paper 82-02-O123] p0425 882-35353

BANG, H. W.
Flying qualities criteria for 6A single pilot IFR operations
p0846 882-26213
Development of flying qualities criteria for single pilot instrument flight operations
[NASA-CP-165932] p0533 882-29288

BANG, H. W.
Minimal order time sharing filters for INS in-flight alignment
p0482 882-38439

BARDAY, J.
The effects on simulators of advances in aircraft technology
p0171 882-20533

BARAK, Y.
Fixed gain controller design for aircraft
p0221 882-23441
Fixed gain controller design for aircraft
[AD-A104877] p0089 882-12081

BARRON, A. R.
Aviation meteorology
p0643 882-36972

BARRO, P. Z.
Extracts from Problems of Air Law, a collection of works of the Section of air law of the Aviakam Society of the USSR and Aviakam ESFSB
[NASA-TF-76913] p0655 882-31153

BASSO, A. J.
Tanker avionics and aircraft complement evaluation
p0293 882-13003
Tanker Avionics/Aircrew Complement Evaluation (TAACE), Phase 1: Simulation evaluation. Volume 1: Results
[AD-A110956] p0452 882-26290
Tanker Avionics/Aircrew Complement Evaluation (TAACE), Phase 1: Simulation evaluation. Volume 2: Crew system design
[AD-A110954] p0543 882-26291

BARRE, L.
Quantification of the thermal environment for externally carried aircraft stores and ordnance
p0019 882-12100

BARRE, L.
Thrust reversing effects on twin-engine aircraft having nonaxiymmetric nozzles
[AIAA PAPER 81-2639] p0108 882-16911
Effect of nozzle and vertical-tail variables on the performance of a 3-surface P-15 model at transonic Mach numbers
[NASA-TP-2943] p0586 882-32320

BARGELLO, F. Z.
Conformal antenna array design handbook
[AD-A1160091] p0322 882-21483

BARGE, L.
An analytical procedure for computing smooth transitions between two specified cross sections with applications to blended wing body configuration
[NASA-TP-2012] p0403 882-25193

BARGES, A. W.
Flight control systems for aerial targets
p0594 882-39725

BARRIN, T. S.
Determination of the trimmed drag of an aircraft
p0127 882-10583

BARRIN, R. S.
Scale-model studies for the improvement of flow patterns of a low-speed tunnel
[NASA-CP-169413] p0209 882-17220

BARRON, A. A.
A survey of melting layer research
[AD-A115224] p0562 882-30806

BARRON, A. A.
The study of combat aircraft maneuverability by air to air combat simulation
p0346 882-22205
BAZERAI, Z. C.

Study of the load-carrying capacity of aviation gas-turbine engine impellers under low-cycle loading at normal and high temperatures

[ASME Paper 81-DTE-147] p0081 A82-15482

BAZERAI, B. G.

Measurements of heat transfer coefficients on gas turbine components. II - Applications of the techniques described in part I and comparison with results from a conventional measuring technique and predictions

[ASME Paper 82-GT-175] p0426 A82-35380

BAZEAI, H. C.

The all composite Lear Fan 2100

p0077 A82-14936

BAZERAI, H. C.

Airworthiness regulation: What is our strategy - What are the issues

p0224 A82-24006

BRADLEY, R. B.

Wind-tunnel results for a modified 17-percent-thick low-speed airfoil section

[AIAA-TP-1919] p0034 A82-11033

BRADLE, L. C.

Sensor failure detection system

[NASA-CR-165155] p0100 A82-12345

BRADLE, J. C.

The design of a viewing system for near real time stereo images from a DIA bore linescan sensor

p0494 A82-39746

A true air speed sensor for miniature unmanned aircraft

[RAF-TP-SPACE-287] p0133 A82-14006

BRADL, T. D.

Predictions of aerodynamic characteristics of highly maneuverable configurations

p0346 A82-22199

BRADL, Z. A.

Mirage 2000 - Towards possible high series production aircraft

p0461 A82-38249

BRADL, B. B.

The CF6 jet engine performance improvement: Low pressure turbine active clearance control

[NASA-CR-165557] p0610 A82-33393

BRADL, B. B.

Wear by generation of electrokinetic streaming currents

[ASLE PREPRINT 82-AN-6A-3] p0443 A82-37857

BRADL, K. K.

Open-cycle vapor compression heat pump

[PHN-116502] p0259 A82-18553

BRADL, J.

Gust load alleviation on Airbus A 300

p0504 A82-40881

Active gust and maneuver load control concepts with the example of the Airbus A300, Part 1: Explanation of a regular in the time zone of wind gust load decrease and examination of its effectiveness in stochastic gusts

[BB-PP-172/S/PUB/3-PT-1] p0267 A82-19228

BRADL, J.

Measurement of the influence of flow distortions on the blade vibration amplitude in an air turbine

[ASME Paper 81-DTE-135] p0162 A82-19348

BRADL, F. H.

Mean flow and noise measurements in a Mach 3.5 pilot quiet tunnel

[AIAA-82-0569] p0236 A82-24657

BEC, J. F.

Wind tunnel tests of powered models: A comparison of two methods of simulating the jets of jet engines

p0095 A82-13087

Wind tunnel tests of engine-equipped models: Comparison of two jet wash simulation methods

[NASA-TP-7664] p0134 A82-14091

BEDDO, J. C.

A new approach to the problem of stress corrosion cracking in 7075-T6 aluminum

p0222 A82-23772

BEDDOE, B. C.

Efficient use of working fluids in aviation hydraulic systems

p0082 A82-15724

BEDDIE, B. C.

Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine

[ASME Paper 81-DTE-143] p0162 A82-19351

BEH, B. C.

The future of integrated CAD/CAM systems - The Boeing perspective

p0167 A82-20278

BEHRENS, R. E.

Design study into a high endurance mini-rotorcraft

p0266 A82-19216

BEHRENS, H. C.

Turbine engine lubricant reclamation

p0055 A82-26312

BEESE, T. N.

Implementing the DAS executive

p0073 A82-19814

BEESE, E. C.

Radiating elements for hemispherically scanned arrays

p0379 A82-32992

BELL, B. C.

Local heat transfer to staggered arrays of impinging circular air jets

[ASME Paper 82-GT-211] p0427 A82-35401

BELL, K. H.

NASA research in aircraft propulsion

p0426 A82-35389

BELL, K. H.

NASA research in aircraft propulsion

[NASA-TN-82771] p0100 A82-13146

BELL, T. W.

The electromagnetic theta gun and tubular freezing of high current production aircraft

p0123 A82-18182

BELL, E. C.

Foundations for computer simulation of a low pressure oil flooded single screw air compressor

(AD-1060230) p0268 A82-19391

BELL, L.

Fuel quality processing study, volume 1

[NASA-CR-165227-VAL-1] p0399 A82-24649

Fuel quality processing study, volume 2: Appendix. Task 1 literature survey


BELLA, L.

Electromechanical Actuation Development Program (EADP). Power control development

p0572 A82-31694

BELLE, T. K.

Operability of military aircraft - Avionic design aspects

p0174 A82-20564

BELLE, R. K.

The Doppler identity of a Microwave Landing System

p0585 A82-22216

BELLO, P.

Proposed multipurpose flying radio-physical laboratory using an XL-16 aircraft

p0550 A82-43728

BELLE, C. E.

Performance characteristics of a buoyant quad-rotor research aircraft

p0513 A82-40974

BELLE, D. B.

CH-47 fiberglass rotor blade design and fabrication

p0260 A82-26397

BELLE, E. B.

Lucas stretched acrylic

p0227 A82-24318

BELLE, W.

Telemetry Computer System at Wallops Flight Center

p0290 A82-27168

BELLE, J. E.

A laboratory rock-salt ultrasonic inspection system for composites

p0419 A82-35256

BELLE, E. R.

Investigation of Falcon model 5858 very high frequency omnidirectional radio range (VOR) system, part 3

[AD-1060555] p0200 A82-17169

BELLE, R. L.

Development of a correlated finite element dynamic model of a complete aero engine

[ASME Paper 81-DTE-74] p0161 A82-19326
BERNEST, L.

BERNEST, L.
A laser interferometer method for determining the forces on a freely-flying model in a shock-tunnel
[ AIAA PAPER 82-3303 ] p0550 A82-43311

BERNER, R. L.
Static internal performance of single expansion-ramp nozzles with thrust vectoring and reversing
[ NASA TP-1962 ] p0302 A82-29156

BERRY, D.
Investigation of subsonic nacelle performance improvement concept
[ AIAA PAPER 82-1042 ] p0437 A82-37676

BERRY, D. E.
Flying qualities - A costly lapse in flight-control design
p0296 A82-28200

BERRY, J. L.
Performance testing of a main rotor system for a utility helicopter at 1/4 scale
[ NASA TN-D-3274 ] p0352 A82-22251

BERRY, L. L.
The LANTIRN wide field-of-view raster Head-Up Display
p0074 A82-14825

BERRY, V. L.
Crashworthy airflow design concepts: Fabrication and testing
[ NASA CR-3603 ] p0613 A82-33735

BESCH, B. L.
Aircraft alerting systems standardization study
[ AIAA 81-2242 ] p0098 A82-13468

Aircraft alerting systems standardization study. Volume 1: Aircraft alerting systems design guidelines
[ AD-1106732 ] p0190 A82-16077

Aircraft alerting systems standardization study. Volume 2: Candidate system validation and time-critical display evaluation
[ AD-407225 ] p0463 A82-27236

Aircraft alerting systems standardization study. Phase 1: Accident implications on systems design
[ AD-A117876 ] p0005 A82-13888

BETHANY, D.
Helicopter development in France
p0208 A82-17216

BETOLONQ, G.
Subsonic military aircraft engine intake: An integrated theoretical experimental design
p0094 A82-13073

BETTSTEIN, R.
Digital avionics - What a pilot expects to see
[ AIAA 81-2217 ] p0047 A82-13455

BETSTEDEK, M. E.
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)
[ AD-A105510 ] p0132 A82-14072

BESSE, J.
The application of WATSON differential GPS in the civilian community
p0235 A82-29645

BESSE, J. E.
Civil (French/US) certification of the Coast Guard's HH-65A Dauphin
p0364 A82-23210

BETTSELLE, R.
The outlook for advanced transport aircraft
p0181 A82-21374

BETTLEY, S. E.
Detached flow past V-shaped low-aspect-ratio wings
p0367 A82-34136

BETTLEY, J. L.
Aerodynamically induced vibration
[ AD-1104093 ] p0455 A82-26306

BETTLEY, R. D.
Aerodynamic interactions between a 1/6-scale helicopter rotor and a body of revolution
[ NASA TN-D-4247 ] p0521 A82-28252

BIVALLO, J.
Corrosion prevention measures used in the construction of an aircraft airframe: The case of 2014 and 2124 alloys
p0212 A82-17360

BEVER, G. L.
The development and use of a computer-interactive data acquisition and display system in a flight...
BIBD, B. I.
Preplanned product improvement and other modification strategies: Lessons from past aircraft modification program
[AD-4113599]
p0463 A82-27220

BIEBI, P.
Electroanisotropic actuators p0261 A82-19148

BIEBI, W., Jl.
Prediction of high alpha flight characteristics utilizing rotary balance data p0510 A82-80953

BIEBI, B. S.
The use of analog computers in solutions of inverse problems of heat conduction for the identification of boundary conditions on the surfaces of gas-turbine-engine parts on the basis of temperature-measurement results p0922 A82-39467

BILLING, T.
N.F. calibrators for Doppler radars p0150 A82-18917

BILLHAB, B. B.
Active beacon collision avoidance logic evaluation. Volume 2: Collision avoidance (BCAS) threat phase
[AD-1017860]
p200 A82-17148

BILLHAB, B. P.
Analysis of a nonlinear altitude tracking method
[AD-1088788]
p263 A82-19197

BIESB, B.
Secondary flow effects and mixing of the wake behind a turbine rotor (ASME PAPERS 82-GT-46-46)
p422 A82-35304

BIESB, J.
Improvement of ejection thrust augmentation by pulsing or flapping jets p0362 A82-23172

BIESB, B. J.
The aerodynamic influences of rotor blade taper, twist, airfoils and solidity on hover and forward flight performance
[AD-1117397]
p605 A82-33357

BIESB, A.
Combustion behavior of solid fuel rocket motors. Volume 1: Correlation of reacting and non-reacting flow characteristics
[AD-4106061]
p136 A82-14316

BIEPIS, B.
Visualization of flow separation and separated flows with the aid of hydrogen bubbles Experimental investigations of the separated flow around a rectangular wing
[DPL-88-PB-81-12]
p0225 A82-10017

BIEPIS, L. B.
Flight trials of the Litos LTV-211 Omega Navigation System in a Wessex helicopter
[SAP-TN-8AD-1187]
p558 A82-30299

BIEPIS, L. B.
The constricted rigging line trials technique for assessing the opening characteristics of parachutes
[AD-A113842]
p0077 A82-10413

BIEPIS, K. A.
Flight trajectory control investigation
[AD-1040542]
p0035 A82-11048

BIEPIS, R. L.
PHCS - A commercial flight management computer system
[AAIA 81-1515]
p484 A82-18938

BIEPIS, R. B.
Tailor-made structures: today and tomorrow: New materials: an exploratory investigation into their potential use
[AD-A0505-A/1-A/005]
p0353 A82-22253

BIEPIS, K. L.
Structural strength of materials and parts of gas-turbine engines p0544 A82-42063

BIEPIS, L. L.
Structural optimization of a swept wing on the basis of the aerodynamic efficiency condition p0388 A82-34185

BIEPIS, R. L.
Improved techniques for the calibration and measurement of in-flight loads
[AD-A113842]
p0058 A82-13924

BIEPIS, J. L.
Notebook on electromagnetic properties of composite materials below 1 GHz
[AAIA 82-15132]
p0559 A82-30340

BIEPIS, J. L.
Computer enhanced analysis of a jet on a cross-stream p0539 A82-29555

BIEPIS, K. A.
The control and guidance unit for MAGIC p0493 A82-39738

BIEPIS, J. E.
Direct comparison of community response to road traffic noise and to aircraft noise p0218 A82-22974

BIEPIS, J.
Wing design for light transport aircraft with improved fuel economy p0065 A82-14146

BIEPIS, D. E.
Investigation of low order lateral directional transfer function models for augmented aircraft
[AAIA 82-1610]
p0485 A82-38989

BIEPIS, J.
Development of longitudinal equivalent system models for selected US Navy tactical aircraft
[AD-1090888]
p306 A82-20189

BIEPIS, K. B.
Pacer Coast II jet engine test system p0295 A82-27903

BIEPIS, K. B.
Preplanned study for a modern 4-bladed rotor for the NASA rotor systems research aircraft
[ASA-16-16613]
p167 A82-16404

BIEPIS, J. E.
Theory and application of optimal airloads to rotors in hover and forward flight p0498 A82-40506

BIEPIS, J. E.
The design and development of the Tornado engine air intake p0906 A82-13074

BIEPIS, C. L.
Gust front structure observed by Doppler radar
[AAIA 8038166]
p0004 A82-10212

BIEPIS, J. B.
Interoperability testing of decentralized command, control, communications and intelligence /C3I/ systems
[AAIA 81-2205]
p0003 A82-10143

BIEPIS, J. P.
Development of in-can melting process and equipment, 1979 and 1980 p0195 A82-16834

BIEPIS, J. A.
Tail rotor studies for satisfactory performance: Strength and dynamic behavior
[SMS-821-210-108]
p353 A82-22250

BIEPIS, K. L.
Blade loss transient dynamic analysis of turbomachinery
[AD-A82-1057]
p0415 A82-34982

BIEPIS, K. L.
Integrated airframe propulsion control
[NASA-16306]
p0593 A82-32382

BIEPIS, J. P.
Asymmetric approach and landing thrust reverser - impacts on engine and LCC
[p0056 A82-40692

BIEPIS, J. J.
Experimental testing at transonic speeds
[AD-1231-35557]
p0231 A82-35557

BIEPIS, E. E.
Predesign study for an advanced flight research helicopter p0500 A82-40525

BIEPIS, R. E.
Adaptation of pylonization to the manufacture of helicopter components p0501 A82-40537

BIEPIS, J. B.
Design and analysis of a digitally controlled integrated flight/fire control system
[AAIA 82-12245]
p0498 A82-13470

BIEPIS, J.
Tactical systems approach to interaction of 2nd echelon moving targets using real time sensors p0472 A82-27306

BIEPIS, R.
Research on an induction driven cryogenic wind
tunnel

BLAKE, D.
Efficient combinations of numerical techniques applied to aircraft turning performance optimization

BLANCHE, R. S.
The impact of missions on the preliminary design of an ABC rotor

BLACK, R. P.
An aircraft wind shear detection and warning system using Doppler radar

BLISS, R. L.
Aerodynamic behavior of a slender slot in a wind tunnel wall

BLOCK, P. J. I.
Operational evaluation of a propeller test stand in the quiet flow facility at Langley Research Center

BLOOM, B. L. F.
Implementable differential equations for nonlinear filtering

BLOOM, J. W.
QCSE under-the-wing engine acoustic data

BLOOM, J. A.
QCSE over-the-wing engine acoustic data

BLOOM, R. W.
FEND - The interface for engine data to AIDS

BLOOM, B. S.
Automated flight data processing

BOARD, R. C.
United States Air Force shale oil to fuels, phase 2

BOIS, P.
Pave River aided integrated strike avionics system

BOCCADORO, C. M.
An ejector augmented choking valve for the metering and control of inlet and bleed duct flows

BOCKSTALE, R. E.
Design analysis of high temperature transparent windshields for high performance aircraft

BODEN, L. L.
Basic studies of the flow fields of airfoil-flap-spoiler systems

BODNER, R. L.
Multifunction multifluid airborne radio architecture study

BODNER, R. A.
Primary data devices

BODNERY, W. V.
The effect of erosion wear on the vibration characteristics of axial-turbine blades

BODSON, M.
Lateral control system design for VTOL landing on a DOD 565 in high sea states

BOE, T. J.
Real time estimation and prediction of ship motions using Kalman filtering techniques

BOHBERT, R.
OLGA - A gust alleviation for general aviation aircraft

BOHRINGER, L. M.
High-efficiency hydraulic power transfer units for multisystem aircraft

BOHRANS, L. E.
Design and tests of airfoils for sailplanes with an application to the ASW-198

BOHRANS, L. E.
On the design of some airfoils for sailplane application

BOHRAS, J. P.
Conformal antenna array design handbook

BORS, R. M.
Carbon fiber reinforced composite structures protected with metal surfaces against lightning strike damage

BOGACHEV, L. S.
Estimation of the efficiency of radioelectronic flight navigation systems

BOGE, J. T.
Factors influencing velocity distributions at inlet/combustor interfaces

BOGDADY, V. A.
Status of the COSPAS-SARSAT project and its possible operation in conjunction with INMARSAT system

BOGSHAD, L. A.
Experimental and analytical studies of advanced air cushion landing systems

BOHLEHARDT, W. L.
Boiled field repair of graphite/epoxy wing skin laminates

BOHUSCHEVA, E. L.
Suppression of self-oscillations in open wind tunnels

BOOSS, J. P.
Potentiality assessment of a parallel structure for the solution of partial differential equations

BOODHAI, B. D.
Three-dimensional calculation of the flow in helicopter air intakes

BOOLAND, J. M.
Automatic handoff of multiple targets

BOLDT, T. L.
Advanced aircraft electrical system control technology demonstrator. Phase 1: Analysis and preliminary design

BOLSOY, G.
Joint US/USSS mode S compatibility test program, volume 1

BOLTE, R. R.
Inlet/combustor interfaces

BOLSMANN, E.
Joint US/USSS mode S compatibility test program, volume 2

BOLZ, E. P.
A multipleresolved digital voice intercommunications system

BOLTON, R. L.
Adaptive fuel control feasibility investigation

BOLTON, R. E.
Development of new lifting parachute designs with increased trim angle

BOLZINGER, E.
The utilization of aircraft in fighting forest fires - French experience

BOLZI, A. J.
Safety system plan

BONNIE, R.
System analysis program plan

BONNET, R.
Lightweight ATC system

BONNEFAY, R.
Recent improvements in aircraft Ni-Cd cells

BONNER, R.
Transonic computational experience for advanced
tactical aircraft

Wing design for supersonic cruise/transonic maneuver aircraft

Supersonic cruise/transonic maneuver wing section development study

(AD-110686)

BOOSER, C.

Aerodynamic tailoring for control and performance: Are requirements compatible?

[ Antonovich, 1979]

BOOSER, D. L.

Terrain model animation

(AD-107911)

BOO, D. L.

A study of the techniques of dynamic analysis of helicopter type structures

p0246 A82-18129

BOOBIE, C. F., JR.

The prevalence of visual deficiencies among 1979 general aviation accident victims

p0187 A82-16054

BOOBIE, E. W.

Practical aspects of instrumentation system installation, volume 13

[NASA-TF-04067]

BOOBIE, G.

Problems relating to the classical rate-gyro

p0099 A82-13140

BOOBIE, J. G.

The well tempered transport aircraft engine /The Sir Heary Booye Memorial Lecture/ Maintenance objectives for future aircraft

p0103 A82-16145

p0224 A82-24005

BOOBIE, G.

A multicomponent system for ATCGS monopulse data processing

p0071 A82-14777

BOOBIE, G.

Combined amplitude-phase modulation for a VHF communication link

p0553 A82-43870

BOOMB, C. J.

Numerical solution of three-dimensional unsteady transonic flow over wings including laminar/turbulent interactions

[AIAA PAPER 82-0352]

Nonlinear transonic flutter analysis

[AIAA PAPER 81-0608]

BODROG, M. C.

The effect of NaCl/g on high temperature oxidation

[ASAE PAPER 82-07-106]

p0624 A82-35302

BODROG, M. L.

The city and aviation

p0149 A82-18898

BODROG, L. P.

Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft

p0550 A82-43278

BODROG, V. A.

Basic problem of aircraft gasturbine engine analytic design. II

p0016 A82-11063

BODROZIC, M. S.

Relationships between naval aviation safety and pilot flight experience

p0012 A82-11031

BORE, E.

A general purpose program for rotor blade dynamics

p0240 A82-18151

BORTNC, R. E.

Weapon system of a future attack aircraft

p0471 A82-27301

BORES, H.

The maximum flying range problem for an aircraft

p0342 A82-31602

BOREY, J. R.

Aviation electronics /4th edition/ p0383 A82-33546

BOSS, F.

Integral Boeing: an automatic calculation model for the prediction and control of fixed-wing aircraft section, 2 - General considerations, theoretical bases and nodal analysis

p0125 A82-18274

Requirements and possible design choices for improving the operation of aircraft in the terminal control area

p0544 A82-18981

BOTOE, R. G.

Integrated avionics - concepts and concerns

[AIAA 81-2211]

The agile transversal filter - a flexible building block for IGR

p0070 A82-14765

BOTORJ, R.

Dynamic response of blades and vanes to wakes in axial turbomachinery

[ASME PAPER 81-DEBT-33]

p0160 A82-19307

BOTTGER, L.

A high strength ejector release unit for the Tornado

p0103 A82-16205

BISED, G. P.

Aircraft alerting systems standardization study. Volume 2: Aircraft alerting systems design guidelines

[AD-A1067342]

p0190 A82-16077

Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation

[AD-A1072225]

p0463 A82-27236

BISED, C. P., JR.

Aircraft alerting systems standardization study

p0048 A82-13460

BISOND, W. H.

Optimization of compressor vane and bleed settings

[ASME PAPER 82-07-81]

Optimization of compressor vane and bleed settings

[AD-A106059]

p0134 A82-14997

BOIZIS, E.

Automatic checking of measuring units in the Kudane wind tunnels

p0390 A82-34998

BOJLAI, J. L.

Instrumentation for testing aircraft antistatic protection

[OMNI, FP NO. 1982-10]

p0389 A82-34995

Aircraft potential variations in flight

p0390 A82-34999

BOJLET, J.

Point of view of a helicopter manufacturer on airworthiness regulations

p0247 A82-18137

BOSQUEL, J.

A numerical method for studying nacelle-jet-airfoil interaction in inviscid three-dimensional flow

p0096 A82-13094

BOSQUEL, B. D.

Integrated structural analysis and design support for advanced launch vehicles

[AIAA PAPER 82-0675]

p0338 A82-30144

BOTTGER, E.

Application of laser velocimetry to large industrial wind-tunnels

[OMNI, FP NO. 1982-63]

p0553 A82-43757

BOIS, R.

Progress in aeronautical research and technology applicable to civil air transports

p0061 A82-13974

BOIS, R. H.

A summary of jet-impingement studies at McDonnell Douglas Research Laboratories

[AIAA PAPER 81-2613]

p0107 A82-16904

BOIS, R. M.

Advanced nozzle integration for air combat fighter application

[AIAA PAPER 82-1125]

p0439 A82-37694

Application of advanced exhaust nozzles for tactical aircraft

p0505 A82-40889

Integration of advanced exhaust nozzles

p0094 A82-13075

BOIS, R. C.

Improvements to secondary radar for air traffic control

p0311 A82-30311

BOXLE, J. V.

Analysis of selected VTOL concepts for a civil transportation mission

[AIAA PAPER 81-2655]

p0157 A82-19220

BOXLE, R. W., JR.

Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft

[NASA-TM-83236]

p0522 A82-18103
Beat release rate calorimetry of engineering
Determining performance parameters of general
Full-scale flammability test data for validation
The potential of large aircraft
The prospects for liquid hydrogen fueled aircraft
C-5A austere airfield operational utility
evaluation. Phase 2: Operation on unpaved soil
surfaces following rainfall
Short range tactical UPA system
Fuel for future transport aircraft
The prospects for liquid hydrogen fueled aircraft
The potential of large aircraft
Will hydrogen-fueled aircraft be safe
Full-scale flammability test data for validation
of aircraft fire mathematical models
Determining performance parameters of general
aviation aircraft
Heat release rate calorimetry of engineering
polymers
PERSONAL AUTHOR INDEX

BROOKS, E. C.
Aviation meteorology in the 1980's - A trend forecast
p0393 482-24164

BROOKS, E. L.
Concorde glazings - 5 years of Mach 2 service
p0228 482-24326

BROOKS, E. L., B.
C-5k unsurfaced taxi and off-load demonstrations
[IAAP PAPER 81-2439]
p0055 482-13975

BROOKS, E. M.
Report of the JANAF Workshop on High Frequency Instrumentation and Data Analysis Techniques
p0321 482-21406

BROWN, R. M.
Titanium surface treatments for adhesive bonding
p0560 482-30378

BROWN, T. E.
Effects of intake geometry on circular pitot intake performance at zero and low forward speeds
p0093 482-13070

BROWN, W. E., T.
Water mapping, archaeology, and ancient land use in the Maya lowlands
[NASA-CR-164931]
p0041 482-11514

BROWN, W. E.
J58/SR-71 propulsion integration or the great adventure into the technical unknown
p0112 482-17418

BROWNE, G. L.
US naval fleet aircraft corrosion
p0211 482-17350

BROWNING, R. C.
Preliminary design study of a hybrid airship for flight research
[NASA-CR-166245]
p0201 482-17152

Preliminary study of ground handling characteristics of Boeing Quad Rotor (QR) vehicles
[NASA-CR-166130]
p0447 482-26220

BROWN, E.
Preliminary functional description of integrated flow management
[AD-A109909]
p0313 482-21171

BROWN, L. N.
Small turbine engine augmentor design methodology
[IAAP PAPER 82-1179]
p0417 482-35044

Pollution reduction technology program small jet aircraft engines, phase 3
[NASA-CR-165386]
p0134 482-14095

EHS fuel addendums: Pollution reduction technology program small jet aircraft engines, phase 3
[NASA-CR-165387]
p0134 482-14096

BRUCKNER, J. J.
Airplane performance sensitivities to lateral and vertical profiles
p0083 482-15846

BRUDD, R. G.
Assessment of aircraft capacitive circuit medium wave antenna according to their efficiency
p0269 482-19453

BRUN, E. J.
Electrical ground testing of aircraft antistatic protection
p0110 482-10822

Electrical ground testing of aircraft antistatic protection
p0242 482-19156

BUERBACK, R. D.
Time referencing of data in an asynchronous environment
[IAAP 81-2341]
p0052 482-13531

BURNS, R. J.
Turbine engine lubricant reclamation
[AD-A112098]
p0455 482-26312

BURNS, R. L.
Rational production methods for the manufacture of helicopter rotor blades
[AD-UP-312-GK-08]
p0316 482-21180

BURNS, R. L.
The low temperature properties of aviation fuels
[IAAP PAPER 82-02-48]
p0342 482-35306

BURNS, R. L.
Analytical investigation of nonrecoverable stall
[ISAS-PR-27292]
p0317 482-21915

Automated procedure for developing hybrid computer simulations of turboshaft engines. Part 1: General description
[NASA-TP-1051]
p0600 482-33020

BAB, F.
Computations of three dimensional unsteady nonuniform flow in the blade-free annular
BORKHARD, A. L.

Development and use of dynamic qualification standards for air force stores
[AIAA PAPER 81-2510] p0057 A82-13908

BOEKES, J. S.

Rover system research aircraft /853/ role force and moment measurement system
[AIAA PAPER 81-2516] p0057 A82-13913

BOENKE, R. N.

Experimental and analytical results of tangential blowing applied to a supersonic V/STOL inlet
[NASA-TN-D-82447] p0193 A82-21465

BORKHOLZER, H. H.

Design to life cycle cost capability of the PRICE models
[TAP PAPER 82-221] p0556 A82-46959

BORKHOLZER, H. N.

Superersonic nozzles without shocks
[p0104 A82-16172

BORKHOLZER, R.

Seeing through flows in Langley's G,3-meter Transonic Cryogenic Tunnel
Flow field studies using holographic interferometry at Langley
[p0597 B82-312978

BORKHOLZER, D. C.

Chicago sonostatic acoustic vortex sensing system.
Volume 2: Decay of B-707 and DC-9 vortices
[AD-1095198] p0302 B82-202157

B-767 vortex alleviation flight tests: ground-based sensor measurements
[AD-1116321] p0469 B82-072287

BORKHOLZER, F.

Airborne Electronic Map System. I - Design
[AD-D-110219] p0071 A82-14770

Airborne Electronic Terrain Map System. II - Applications
[p0071 A82-14773

BORKHOLZER, R. A.

Advanced aerodynamic design for future combat aircraft
[p0504 A82-40879

BORKHOLZER, R. P.

Mapping in tropical forests - A new approach using the laser APF
[p0168 B82-20407

BORKHOLZER, R. C.

Source assessment system
[AD-1112122] p0412 B82-25613

BORKHOLZER, R. C.

Strain gage inertial reference systems performance analysis
[p0066 B82-14682

BORKHOLZER, T. F.

Experimental studies of the Eppler 61 airfoil at low Reynolds numbers
[AIAA PAPER 82-0345] p0164 A8219796

BORKHOLZER, W. D.

GTO analysis of airborne antennas radiating in the presence of ionoor dielectric layers
[NASA-CR-168770] p0357 B82-22398

Elevation plane analysis of on-aircraft antennas
[AD-1112373] p0360 B82-26554

Near field analysis of airborne antennas
[AD-1105074] p0561 B82-20642

BORKHOLZER, J. U.

Fuel optimal trajectory computation
[p0283 A82-26568

BORKHOLZER, L. T.

A survey of U.S. Army helicopter main and tail rotor blade obstacle strikes
[p0278 B82-26385

BORTON, R. L.

F/A-18 high authority/high gain digital flight control system development and flight testing
[AIAA PAPER 81-2645] p0505 B82-13930

BORTON, E. A.

Analysis of the crossed dipole antenna as a mode for aircraft in an electromagnetic environment
[p0242 B82-25002

BORTON, T. D.

Describing function analysis of nonlinear nose gear shock

BUSSELL, R.

Panel Optimization with Integrated Software
(POIS). Volume I: PANDA: Interactive program for preliminary minimum weight design
[AD-110963] p0411 A82-25404

BUSSEY, L. L.

A simple finite difference procedure for the vortex controlled diffuser
[AIAA PAPER 82-0109] p0115 A82-17786

BUSSEY, J.

Simple vs. sophisticated TacAir avionics. II - Soviet TacAir avionics technology
[p0297 A82-26397

BUSTAMANTE, H. L.

A GPS receiver design for general aviation navigation
[p0122 A82-18132

BUTCHER, D. K.

Non-honeycomb F-16 horizontal stabilizer structural design
[p0509 A82-40936

BUTLER, R. V.

Effect of downwash on the induced drag of canard-wing combinations
[p0298 A82-28518

BUTTERWORTH, P. S.

Overview of flight and ground testing with emphasis on the wind tunnel
[AIAA PAPER 82-2674] p0358 A82-13928

An assessment of the real-time application capabilities of the SIFT computer system
[NASA-TN-84882] p0413 B82-25811

BUTTERWORTH, E. L.

Visual technology research simulator, visual and motion system dynamics
[AD-1118001] p0457 B82-26325

BUTTARI, C.

Complete flexibility and realism in radar simulation
[p0482 B82-30461

BUTTERT, W. G.

Assessment of lightning simulation test techniques, part I
[AD-1112626] p0477 B82-27663

BUTTERT, W. J.

Low-speed measurements of the static pressure distribution and overall forces on a cambered and a symmetric mild gothic wing of aspect ratio 4
[BAE-TR-80066] p0312 B82-21161

BIRD, J. A.

Ceramic components for automotive and heavy duty turbine engines - CAST and AGT 100
[ASHE PAPER 82-GJ-251] p0429 B82-35432

BIRD, J. C.

The LANTIER wide field-of-view raster Head-Up Display
[p0074 B82-14825

BIRDSONG, T. A.

Wing flap-type control effectiveness and effects of control hinge gap seals for a supercritical wing
[AIAA PAPER 82-0960] p0366 A82-34008

Low-altitude and lateral static stability and control characteristics of a 1/6-scale model of a remotely piloted research vehicle with a supercritical wing
[NASA-TP-1306] p0145 B82-15075

C

CABBAR, P.

Parametric study of the influence of the engine upon the operating cost of a civil helicopter
[p0246 B82-18131

Paradigm study of the influence of the engine upon the operating cost of a civil helicopter
[SMAS-027-210-102] p0355 B82-22273

CADDY, L. M.

A system design for a multispectral sensor using two-dimensional solid-state imaging arrays
[p0377 B82-31991

CAFFEY, H. J.

System approach to the design of wind shear avionics
[ASHE-82-146266] p0147 B82-16008

CAGLIANI, L. K.

An aircraft sensor fault tolerant system
[ASHE-82-165876] p0607 B82-152536
Experimental investigations on the design and test of a centrifugal fan

Recent research on the aerodynamic characteristics of a composite aircraft fuselage

Development of a distributed planner for air fleet control

Recent developments in aviation systems

Experimental investigations of aircraft trajectory optimization

Software features applicable to inertial — — —

Post analysis of aircraft accident environments

Recent developments in aviation systems

Application of laser velocimetry to large industrial wind-tunnels

Experimental investigations of aircraft trajectory optimization

Recent developments in aviation systems
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Page Numbers</th>
<th>DOIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASE, P. M.</td>
<td>Testing of turbine-powered runway distance and taxiway markers</td>
<td>p0612 882-33408</td>
<td>[AD-A1148558]</td>
</tr>
<tr>
<td>CAST, J. B.</td>
<td>Improvement of fuel economy by flying with maximum rearward center-of-gravity positioning</td>
<td>p0221 A82-23470</td>
<td></td>
</tr>
<tr>
<td>CASTINO, R.</td>
<td>Coupled rotor/airframe vibration analysis program manual Volume 1: User's and programmer's instructions</td>
<td>p0573 A82-31965</td>
<td>[NASA-CR-165891]</td>
</tr>
<tr>
<td>CATHER, G. B.</td>
<td>Multiple ejection effects analysis</td>
<td>p0252 A82-18192</td>
<td>[AIAA 81-08277]</td>
</tr>
<tr>
<td>CAST, R. H.</td>
<td>In-service testing of the Precision Approach Path Indicator (PAPI) at Newark International Airport, New Jersey</td>
<td>p0132 A82-18076</td>
<td>(DOT/FAA/BD-81/95)</td>
</tr>
<tr>
<td>CASTLEBERRY, H. M.</td>
<td>State-of-the-art cockpit design for the HH-65A helicopters</td>
<td>p0366 A82-23220</td>
<td></td>
</tr>
<tr>
<td>CASTO, F. P.</td>
<td>An evaluation of several polymers for high density humidity PC coatings</td>
<td>p0292 A82-27432</td>
<td></td>
</tr>
<tr>
<td>CATSEN, D.</td>
<td>Geophysical flight line flying and flight path recovery based on the LITON LTE-76 inertial navigation system</td>
<td>p0534 A82-29292</td>
<td>[DODR-005555]</td>
</tr>
<tr>
<td>CAUDIL, L. E.</td>
<td>Cloud top remote sensing by airborne lidar</td>
<td>p0379 A82-32920</td>
<td></td>
</tr>
<tr>
<td>CASEY, R. P.</td>
<td>Static and unsteady pressure measurements on a 50 degree clipped delta wing at ( \theta = 0.9 )</td>
<td>p0338 A82-30153</td>
<td>[AIAA 82-0806]</td>
</tr>
<tr>
<td>CHEA, S. A.</td>
<td>The effect of a well on the aerodynamics of a spoiler</td>
<td>p0263 A82-19194</td>
<td>[AD-B-268]</td>
</tr>
<tr>
<td>CHERNO, R.</td>
<td>Recent improvements in prediction techniques for supersonic weapon separation</td>
<td>p0116 A82-17820</td>
<td>[AIAA PARK 82-0170]</td>
</tr>
<tr>
<td>CHIMES, A. L.</td>
<td>Navigation task partitioning in distributed-processing avionics systems</td>
<td>p0009 A82-10646</td>
<td></td>
</tr>
<tr>
<td>CHESNOS, G.</td>
<td>Fatigue test of the typical main rotor controls component</td>
<td>p0240 A82-24715</td>
<td></td>
</tr>
<tr>
<td>CHABANER, J. P.</td>
<td>Importance of a tactical cargo aircraft in emergency relief</td>
<td>p0263 A82-25499</td>
<td></td>
</tr>
<tr>
<td>CHACON, R.</td>
<td>The use of adaptive control for helicopter trajectories in search operations</td>
<td>p0154 A82-19065</td>
<td></td>
</tr>
<tr>
<td>CHADDA, R.</td>
<td>Electronic stabilization of an aircraft</td>
<td>p0491 A82-39322</td>
<td>[SBE PAPER 81763]</td>
</tr>
<tr>
<td>CHADDA, R.</td>
<td>Electronic aircraft stabilization</td>
<td>p0555 A82-44234</td>
<td>[NASA-CR-165892]</td>
</tr>
<tr>
<td>CHADDE, R. W.</td>
<td>JDGS BELAY network off-line simulation</td>
<td>p0123 A82-18153</td>
<td></td>
</tr>
<tr>
<td>CHADDE, R. W.</td>
<td>Development of a clear air radar to detect meteorological hazards at airports</td>
<td>p0260 A82-18835</td>
<td>[AD-A108236]</td>
</tr>
<tr>
<td>CHAFFER, J.</td>
<td>Data processing at the Global Positioning System</td>
<td>p0260 A82-18835</td>
<td></td>
</tr>
</tbody>
</table>

**CBAI**
CIBBLOC. C. C.
Damage tolerance and durability design of composite structures for commercial aircraft
p0390 882-34538

CIBBLOC. C. C.
Digital computer simulation of modern aeroscienical digital communication systems
p0509 882-40940

CIBBLOC. C. L.
A numerical study of the turbulent flow past an isolated airfoil with trailing edge separation
[AIAA PAPER 82-0998] p0375 882-31958

CIBBLOC. C. L.
A unified approach to helicopter NASTRAN modelling
[AHS PREPRINT 81-22] p0443 882-37993

CIBBLOC. C. L.
D.C.9 windshield - Effect of attachment retorque
p0228 882-28324

CIBBLOC. C. L.
Ground test of a large scale ‘D’ wasted thrust deflection nozzle
[AIAA PAPER 83-2630] p0108 882-16907

CIBBLOC. C. L.
Traffic infrastructure: Can planning still be carried through
p0350 882-22232

CIBBLOC. C. L.
Development of engine operability
[AIAA PAPER 82-1101] p0418 882-35046

CIBBLOC. C. L.
3 DOF gyro analysis from measured and derived rates
[AIAA PAPER 82-1089] p0116 882-17831

CIBBLOC. C. L.
Reduced phase flow properties for infrared analysis
p0114 882-17666

CIBBLOC. C. L.
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack
p0185 882-22094

CIBBLOC. C. L.
Geodesic paths of an ellipsoid-mounted antenna
[AD-A116453] p0596 882-32573

CIBBLOC. C. L.
Accurate numerical solution of compressible, linear stability equations
p0382 882-33571

CIBBLOC. C. L.
The effect of ejector augmentation on test-section flow quality in the Calspan 8-ft transonic wind tunnel
[AIAA PAPER 62-0571] p0236 882-24658

CIBBLOC. C. L.
Report of the AIAA Workshop on High Frequency Instrumentation and Data Analysis Techniques
p0321 882-21406

CIBBLOC. C. L.
ARINC 429 digital data communications on the Boeing 757 and 767 commercial airplanes
[81 AIAA-2227] p0049 882-13485

CIBBLOC. C. L.
Modal control of relaxed static stability aircraft
[AIAA 82-1528] p0004 882-38944

CIBBLOC. C. L.
Recent development in hygrothermoacoustic analysis of components
p0529 882-28676

CIBBLOC. C. L.
Aviation fuels-future outlook and impact on aircraft fire threat
p0532 882-29282

CIBBLOC. C. L.
Simulation of the XV-15 tilt rotor research aircraft

CIBBLOC. C. L.
Computations of transonic flow over an oscillating airfoil with shock-induced separation
[AIAA PAPER 82-0350] p0119 882-17900

CIBBLOC. C. L.
Application of nonlinear systems inverses to automatic flight control design: System concepts and flight evaluations
p0339 882-11083

CIBBLOC. C. L.
Application of wear debris analysis to aircraft hydraulic systems
[AD-A115606] p0558 882-30305

CIBBLOC. C. L.
Advanced subsonic transport propulsion
[AIAA PAPER 81-0811] p0180 882-20674

CIBBLOC. C. L.
Subsonic cascade wind tunnel tests using a compressor configuration of OCA blades
[AD-A104597] p0038 882-11069

CIBBLOC. C. L.
Design of finite element grids for the computation of the three-dimensional transonic flow around a wing
[AIAA PAPER 82-1019] p0375 882-31972

CIBBLOC. C. L.
Canadair rotary wing technology development
p0493 882-39731

CIBBLOC. C. L.
A study of wind shear effects on aircraft operations and safety in Australia
[ARL-SCI-REP-24] p0522 882-28265

CIBBLOC. C. L.
Photointerpretation key for nose regeneration analysis using high-altitude color infrared panoramic photography
p0562 882-30606

CIBBLOC. C. L.
Real-time simulation of an airborne radar for overwater approaches

CIBBLOC. C. L.
Fuel property effects on radiation intensities in a gas turbine combustor
p0166 882-19966

CIBBLOC. C. L.
The evolution of airborne weather avoidance radar toward a calibrated remote rain gauge using SEAST
p0004 882-10225

CIBBLOC. C. L.
Flying quality requirements for V/STOL transition
[AIAA PAPER 81-1393] p0496 882-40276

CIBBLOC. C. L.
Replacement of aboard naval aircraft
p0590 882-32356

CIBBLOC. C. L.
Sloped wall test section for automotive aerodynamic test facilities
[AIAA 82-0585] p0237 882-24661

CIBBLOC. C. L.
Instrument failure detection in partially observable systems
p0436 882-37300

CIBBLOC. C. L.
Development of a simple, self-contained flight test data acquisition system
p0177 882-20756

CIBBLOC. C. L.
A simple, low cost application of a flight test parameter identification system
[AIAA PAPER 82-1312] p0487 882-39093

CIBBLOC. C. L.
Development of a simple, self-contained flight test data acquisition system

CIBBLOC. C. L.
VOR waveforms synthesis and calibration
p0106 882-16563

CIBBLOC. C. L.
Vibration of structures excited acoustically
p0307 882-20343

CIBBLOC. C. L.
Prediction and performance of radome-covered reflector antennas
p0080 882-15311

CIBBLOC. C. L.
Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability
p0500 882-40531

CIBBLOC. C. L.
New all-electric-system technology
p0067 882-14710

CIBBLOC. C. L.
Electric flight systems
p0261 882-19144

CIBBLOC. C. L.
The effect of swirl burner aerodynamics on NOx formation
p0326 882-28658

CIBBLOC. C. L.
[AD-A106052] p0136 882-14824

CIBBLOC. C. L.
Functional requirements for the man-vehicle systems research facility
B-26
ATTER, J. L.
Characteristics of future aircraft impacting Alert aircraft roll over chocks
[NASA-TH-86476] p0463 882-27333

ATTER, J. L.
Maintenance posture for quick start
[AD-A107555] p0204 882-17177
Alert aircraft roll over chocks
[AD-A107056] p0527 882-28307

ATTER, L. L.
Noise monitoring in airport communities
p0129 882-18731

ATTER, L. E.
Determination of the efficiency of a trailing edge flap in unsteady three-dimensional flow
p0507 882-40910

ATTER, L. E.
Rolling requirements for ASIL-B-83282 and ASIL-B-6083 aircraft hydraulic fluids
[AD-A112437] p0475 882-27506

ATTER, L. E.
Special problems associated with aircraft radios
p0106 882-16558

ATTER, C. E.
Delay-augmented data links in an interference environment
p0176 882-20684

ATTER, C. E.
Noise tolerant design for cold-section turbine engine disks
[AD-A107963J p0204 882-17176

ATTER, C. E.
Methodology for multi-aircraft minimum noise impact landing trajectories
p0216 882-23037

ATTER, C. E.
Static noise tests on modified augmentor wing jet STOL research aircraft
[NASA-TH-81231] p0525 882-28295

ATTER, K. L.
KC-10, flight test program management - The contractor's viewpoint
[AIAA PAPER 81-2380] p0064 882-14384

ATTER, L. J.
Digital Airline Information System (DAIS): Development and demonstration
[AD-A107906] p0190 882-16079

ATTER, P. L.
Aerial combat simulation in the U.S. Air Force
p0295 882-27920

ATTER, L. L.
Coordinate transformation in PLIB
p0126 882-18158

ATTER, D. H.
Selected reliability and control derivatives from the first Space Shuttle entry
[AIAA PAPER 81-2451] p0056 882-13880

ATTER, H. R.
A simulator assessment of a wide field of view head-up display for presenting a FLIR sensor image during low level navigation and ground attack missions
[AIAA PAPER 82-0261] p0184 882-22079

ATTER, D. L.
Bomb crater repair techniques for permanent airfields. Report 1: Series 1 tests
[AD-A108071E] p0257 882-18229

ATTER, R. L.
The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
[AIAA PAPER 82-GT-285] p0430 882-35457

ATTER, W. D.
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria
p0443 882-35734

ATTER, L. P.
The control and guidance unit for MACH 1
p0493 882-39738

ATTER, F. G.
Flight test evaluation of a video tracker for enhanced offshore airborne radar approach capability
p0500 882-40531

ATTER, R. D.
Design of the composite spar-wingskin joint
p0166 882-20128

ATTERLAND, J. L.
Research through simulation
[NASA-PACTS-125] p0192 882-16092

ATTERBAY, W. E.
Procurement of F-100/3/ high pressure compressor entrance profiles
[NASA PAPER 82-GT-215] p0427 882-35402

ATTER, J. F.
The outlook for advanced transport aircraft
p0181 882-21374

ATTER, R. L.
Third generation turbo fans
p0511 882-40964

ATTER, R. L.
Interactive-graphics flowpath plotting for turbine engines
[NASA-TH-82756] p0042 882-15041

ATTER, J. C.
Assessment of aircraft susceptibility/vulnerability to lightning and development of lightning-protection design criteria
p0433 882-35734

ATTER, R. L.
Marine Air Traffic Control and Landing System (MATS/CA) investigation
[AD-A113047] p0468 882-27276

ATTER, C. E., J. E.
F-16 ground and inflight icing testing
p0177 882-20753

ATTER, C. L.
Operational flow visualization techniques in the Langley Unitary Plan Wind Tunnel
p0597 882-32671

ATTER, L. B.
A methodology for missile launch envelope display evaluation
p0069 882-14794

ATTER, C. E.
Component coupling with time-invariant mass matrix for nonisotropic rotating and nonrotating systems
[AIAA 82-0731] p0340 882-30179

ATTER, L. E.
A criterion for determining the causes of wind shear at Paine Field Airfield, on the basis of statistical data from barograph records
p0180 882-15468

ATTER, R. R.
Relaxation solution for viscous transonic flow about fighter-type forebodies and afterbodies
[AIAA PAPER 82-0252] p0118 882-17865

ATTER, J.
Wind tunnel studies of store separation with load factor - Freedrops and captive trajectories
p0393 882-33626

ATTER, J. E.
Wind tunnel studies of store separation with load factor. Freedrops and captive trajectories
p0541 882-30261

ATTER, R. K.
Aircraft energy conservation during airport ground operations
[AD-A116138] p0589 882-32352

ATTER, J. E.
Using voice control onboard combat aircraft
p0092 882-13056

ATTER, J. J.
Aerodynamic equivalence of a helicopter rotor in the presence of nonlinear aerodynamic forces
[OBETTCAL 81-05-08] p0547 882-42809

ATTER, S. E.
Ground calibration of a strain-gaged CT-4A aircraft (1979)
[AD-A107947] p0189 882-16073

ATTER, S. E.
Survey and update of F-14A mission profiles for TFU-1 engine usage
[AD-A166831] p0602 882-33337

ATTER, J. E.
Application of Kalman filtering to the kinematic reconstruction of free flight of catapulted
B-29
Flight test method for the determination of design and performance of airborne radomes - A review.

The all electric airplane - A new trend in aircraft design.

Performance of a 2D-CD nonaxisymmetric exhaust nozzle on a turbojet engine at altitude.

Steady, Oscillatory, and Unsteady Subsonic and Transonic Applications of the Hake Imaging System.

Investigation of functional commonality of avionics systems in naval aircraft.

Lighting simulation and testing.

Computer program for aerodynamic and blade design of multistage axial-flow compressors.

Light weight adhesive joining of composite structures.

Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser.

In-flight propeller flow visualization using fluorescent minitubes.

Computer program for aerodynamic and blading design of multistage axial-flow compressors.

Laboratory-scale simulation of underground coal gasification: Experiment and theory.

The all-electric airplane - Its development and logistic support.

Modeling of a tracking radar in terms of a nonlinear second order phase lock loop.

Ejector powered propulsion and high lift subsonic wing.

Discrete address beacon, navigation and landing system.

Evaluation of requirements and design for the future.

The need for, and development of, a simulation facility at the Naval Air Test Center.

Terrain model animation.

Discrete address beacon, navigation and landing system.

Evaluation of requirements and design for the future.


Design and performance of airborne radomes - A review.

Development of accelerated fuel-engines: quality procedures methodology, Volume 1: Appendices.

A method for predicting the lifetime of gas turbine blades.

Radar mapping, archaeology, and ancient land use in the Maya lowlands.

A model testing technique for refurbishing and processing parachutes.

An analytical treatment of the combined effect of several wings calculated by the SODSSA Pl.1 panel method.

Investigation of functional commonality of avionics systems in naval aircraft.

Investigation of acoustic characteristics and flutter characteristics of several wings calculated by the SODSSA Pl.1 panel method.

Laboratory simulations and tests of a forward-swept wing fighter configuration.

The need for, and development of, a simulation facility at the Naval Air Test Center.

A method for predicting the lifetime of gas turbine blades.

Discrete address beacon, navigation and landing system.

Evaluation of requirements and design for the future.

Development of accelerated fuel-engines: quality procedures methodology, Volume 1: Appendices.

A method for predicting the lifetime of gas turbine blades.

Discrete address beacon, navigation and landing system.

Evaluation of requirements and design for the future.
Deposit formation in liquid fuels. I - Effect of
introduced computational transonic - Capabilities
bev separators for battery systems
Helicopter icing
Performance degradation of propeller/rotor systems
Highlights of a design concept for a close ground
The distress regime on the bimotored helicopter
The use of the leber method for
Terminal Information Processing System (UPS)
Conceptual design study for an advanced cab and
A dual input actuator for fluidic backup flight
telrotor studies for satisfactory performance: Strength and dynamic behavior
The measurement of the mobility of structures at
Introduction to the principles of fracture mechanics
Evaluation of sensitivity of ultrasonic detection
Deposit formation in liquid fuels. II - The effect
Jet a turbine fuel
Design of a longitudinal ride-control system by
Fractographic determination of fatigue crack
growth rates in aircraft components
Performance evaluation of target report extractor
The application of condition monitoring
Design of a data acquisition and reduction system
Tail rotor studies for satisfactory performance:
Strength and dynamic behavior
The measurement of the mobility of structures at
Jet a turbine fuel
Deposit formation in liquid fuels. I - Effect of
coil-derived Lewis bases on storage stability of
Jet a turbine fuel
Deposit formation in liquid fuels. I - Effect of
Integration of controls and displays in U.S. Army helicopter cockpits
[AD-A109559] p0106 A82-20191

DAVIS, C.
Synthesis of an integrated cockpit management system
[AD-A109559] p0366 A82-23222

DAVIS, C.
Flag-lag-torsional dynamics of extensional and
incensional rotor blades in hover and in
forward flight [NASA-CH-169159] p0535 A82-29312

DAVIS, S. J.
Aircraft composite materials and structures
Aerospace applications of composites
[AD-A1157083] p0103 A82-16143

DAVEY, J. T.
Sound transmission through ducts and aircraft
noise prediction, volume 1 [AD-A1157083] p0602 A82-33164

DAVIES, R. A.
A generalized escape system simulation computer
program: A user's manual [AD-A1165152] p0187 A82-16055

DAVIES, P. M.
Logistics research program in the United States
Air Force [AD-A1161009] p0511 A82-40963

DAVIES, L. J.
Optimization and performance calculation of
dual-rotation propellers [NASA-TP-1998] p0131 A82-14099

DAVIS, B. L.
New developments in cockpit-human interfaces
[RAD-TR-PS-412] p0255 A82-18215

DAVIS, G. E.
Fluidics in aircraft engine controls
[AD-A1161009] p0128 A82-18691

DAVIES, R. F.
Powder metallurgical innovations for improved hot
section alloys in aero-engine applications
[PB9-90772] p0357 A82-22358

DAVIS, J. D.
The development of terrain following displays for
the Tornado aircraft
[REP-200] p0587 A82-32337

DAVIS, R. L.
LMH - An advanced avionics system design
[AIAA 81-2249] p0048 A82-13472

DAVIS, R. L.
Three dimensional mean velocity and turbulence
characteristics in the annulus wall region of an
axial flow compressor rotor passage
[NASA-CH-169003] p0408 A82-25252

DAVIS, C. C.
Performance of multiple, angled nozzles with short
mixing stack eductor systems
[AD-A1101617] p0454 A82-26302

DAVIS, B. L.
Coaxial dual basejet combustion
Instability: Part I: Parametric test data
[AD-A111335] p0409 A82-25259

DAVIS, F. G.
Pollution reduction technology program small jet
aircraft engines, phase 3 [NASA-CH-165386] p0134 A82-14095

ERBS fuel addendum: Pollution reduction
technology program small jet aircraft engines,
phase 3 [NASA-CH-165387] p0134 A82-14096

DAVIS, F. M.
Engine experience of turbine rotor blade materials
and coatings
[AIAA PAPER 82-GT-244] p0428 A82-35425

DAVIS, G. A.
Recent improvements at the Naval Air Test Center
for increased test system flexibility
[AIAA PAPER 81-2392] p0056 B82-12388

DAVIS, J. W.
Fatigue behavior of selected non-woven fiber
composites for helicopter rotor blades
[AD-A111335] p0170 A82-20524

DAVIS, P. A.
Passive direction finding and signal location
[AD-A111335] p0578 A82-45306

DAVIS, M. W.
A stage-by-stage dual-spool compression system
modeling technique
[AIAA PAPER 82-GT-189] p0427 A82-35394

DAVIS, B. L.
Fuel conservation now
[0111 A82-17281

The employment of two-engine and four-engine
aircraft for dropping the latest chemical fire
extinguishing agents in connection with the
fighting of forest fires
[0331 A82-29583

DAVIS, B. L.
Probability of laminar flow loss because of ice
crystal encounters
[0302 A82-20153

DAVIS, B. L.
Advanced turboprop engines for long endurance
naval patrol aircraft
[AIAA PAPER 82-GT-217] p0427 A82-35404

DAVIS, B. L.
Analytical design and validation of digital flight
control system structure
[AIAA PAPER 82-1626] p0497 A82-40434

DAVIS, S. L.
A Schwarz-Christoffel method for generating
internal flow grids
0328 A82-29005

DAVIS, B. L., JR.
Advanced exhaust nozzle concepts using spurious
blowing for aerodynamic lift enhancement
[AIAA PAPER 82-1132] p0438 A82-37692

DAVISON, J. W.
Design principles of a computer-aided design system
[S0333 A82-29829

DAWSON, C.
Air cooled engine test facilities
0223 A82-24004

DAWSON, S.
An experimental investigation of a bearingless
model rotor in hover
[0498 A82-40512

DAVITY, J. A.
A split coefficient/locally monotonic scheme for
multishocked supersonic flow
[AIAA PAPER 82-2087] p0184 A82-22082

DASSO, J. J.
Effects of higher order control systems on
aircraft approach and landing longitudinal
handling qualities
[0563 A82-30948

DAZZO, J.
Direct digital design method for reconfigurable
multivariable control laws for the A-7D Digital
II aircraft
[0074 A82-14620

DE CAPITANO, R.
Material identification for the design of
composite rotary wings
[0509 A82-40937

DE GILBERT, J.
Modernizing air traffic control in France
0205 A82-27048

DE GRECO, R.
Subsonic flow over airborne optical turrets
[0114 A82-17605

DE KORING, L. L.
A simple crack closure model for prediction of
fatigue crack growth rates under
variable-amplitude loading
[0204 A82-26630

DE LUCCHI, J. L.
Recent developments in materials and processes for
aircraft corrosion control
0211 A82-26832

DE NARDELLI, R.
Recent developments in materials and processes for
aircraft corrosion control
0201 A82-24825

DE NARDELLI, R.
A new approach to the problem of stress corrosion
cracking in 7075-T6 aluminum
0222 A82-23772

DE BUCK, J.
Instantaneous turbulence profiles in the wake of
an oscillating airfoil
[AIAA PAPER 82-0535] p0119 A82-17901

DE SILVA, D. W.
Real-time failure detection of aircraft engine
output sensors
0297 A82-24043

DE SIMONE, G.
The impact of emissions on the preliminary design of
an ABC rotor
03-32
DBU., OBU6BLIS, f. a.
DBAB, U. i.. Ill
B. B.
DEM, OEB. B. L.
OEUB. B. L.
DBABDA. U 6.
DBCABBE, D.
DBBBA, 0. B.
OBCKBB, 8.
•BCHEB, B.
DBSBAAF, B. A. B.
DBGABI, O.
DEFOB. P. 0.
DBCB8EB, a.
DBOIBO, a. P.
DECBBMBHS, B.
OBCKBBI. B. B.
Prediction of fatigue crack growth rates under variable loading using a simple crack closure model
DELBAB, B.
Flight simulation consoles, aid or obstruction - Objective evaluation of control consoles of modern flight and tactics simulators
DELBB, B.
Combined amplitude-phase modulation for a VHF communication link
DELALAT, B.
An acquisition and analysis system for dynamic tests of air shafts
DELSAB, L.
System for acquisition and analysis of dynamic tests on air intakes
DELSAC, B.
High-temperature research
DELEB, B.
Dynamic response of an aircraft gas turbine engine rotor failures that occurred in U.S. commercial aviation during 1978
DELENK, K. B.
The noise impact of proposed runway alternatives at Craig Airport
DELECA, G. J.
The noise impact of proposed runway alternatives at Craig Airport
DELES, L.
Utilizing the helicopter's verticality to improve the NBC system
DELENK, K. B.
The noise impact of proposed runway alternatives at Craig Airport
DELFRA, L.
Rotor fragment protection program: Statistics on aircraft gas turbine engine rotor failures that occurred in U.S. commercial aviation during 1978
DELEBUR, K. G.
Utilizing the helicopter's verticality to improve the NBC system
DELFRA, L.
Review aeronautical fatigue investigations in the Netherlands, March 1979 - February 1981
DELFRA, L.
Influence of icing treatment on the operating range of axial compressors
DESCHAFFER, B.
Programming of acoustic absorbing materials for aircraft engine applications
DESHAFFER, B.
Operational evaluation of thunderstorms
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engine
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DESHOFF, R. M.
Influence of icing treatment on the operating range of axial compressors
DESHOFF, R. M.
Development of multivariable controllers for aircraft turbine engines
DBPOI66, S. L.
Mathematical models of rotor strength and optimization in computer-aided design
p0545 AB2-62462

DBPOI66, S. L.
Quality optimization and unification of aviation gasoline
p0081 AB2-15721

DBPOI66, S. L.
Airfield construction - A reference book
p0584 AB2-48264

DEBIBO6, J. P.
Helicopter decelerated steep approach and landing to confined areas under instrument meteorological conditions
p0125 AB2-18161

DESIB6, L.
Sensitivity of bonded and bolted joints in composites to load/environmental spectrum variations
p0289 AB2-27150

DESIB6, L.
High temperature engine control electronics
(AIAA PAPER 811074)
p0233 AB2-28407

DEBIBO6, L. L.
Structures testing analysis real-time network (STARNET)
(AD-8111636)
p0413 AB2-25827

DEBIBO6, C.
A pilot's view on possible uses of AIDS
p0401 AB2-25176

DEBIBO6, J. D.
Through flow calculations in axial turbomachines (AGARD-AG-175)
p0206 AB2-17178

DEBIBO6, L. G.
Fracture mechanics technology applied to individual aircraft tracking
p0284 AB2-26637

DEBIBO6, R. B.
Continuous filament advanced composite isogrid - A promising structural concept
p0288 AB2-27138

DEBIBO6, L.
Parameteric criteria and impact on design trends
p0477 AB2-18139

DEBIBO6, S.
An experimental analysis of the shape of a rotor wake
p0245 AB2-18122

DEBIBO6, R.
Experimental investigation of aerelastic instability of open field thin profiles
p0572 AB2-31705

DEBIBO6, R.
From the A 300 to the A 310
p0382 AB2-33542

DEBIBO6, J. Jr.
AIDM plane flow properties for infrared analysis
p0114 AB2-17606

DEBIBO6, J.
Comparison of reliability, sensitivity and accuracy of some KDI-Techniques
(ELF-TR-60039-0)
p0371 AB2-23542

DEBIBO6, J.
Comparison between probability of detection, sensitivity, and accuracy of five nondestructive inspection methods
(ELM-BP-6303-0)
p0398 AB2-26500

DEBIBO6, E.
Two-dimensional model studies of the impact of aircraft exhaust emissions on tropospheric ozone
p0496 AB2-40124

DESIBO6, L. R.
User's manual for interfacing a leading edge, vortex rollup program with two linear panel methods
(AIAA TP-801344)
p0604 AB2-33340

DEBIBO6, L.
Safe systems decelerator technology
(AIAA PAPER 81-1913)
p0601 AB2-13966

U.S. Navy life support development trends
p0077 AB2-14052

DESIBO6, L.
Flight demonstration of an integrated floor/fuel isolation system
(AES PREPRINT 81-16)
p0442 AB2-37708

DESIBO6, L.
Subsonic aerodynamic and flutter characteristics of several wings calculated by the S005A Pl.1 panel method
(AIAA PAPER 82-0727)
p0341 AB2-30193

DEBIBO6, L.
An accurate method for evaluating the kernel of the integral equation relating lift to downwash in unsteady potential flow
(AIAA TP-82-23194)
p0363 AB2-23194

DEBIBO6, L.
Subsonic aerodynamic and flutter characteristics of several wings calculated by the S005A Pl.1 panel method
(AIAA TP-82-4045)
p0405 AB2-25216

DEBIBO6, L.
Experimental investigations on the flow in the impeller of a centrifugal fan
(AIAA PAPER 82-0727)
p0421 AB2-35298

DEBIBO6, L.
Concept studies of an advanced composite helicopter fin
(SRIS-82-210-106)
p0353 AB2-22257

DEBIBO6, L.
Finite difference modeling of rotor flows including wake effects
(AIAA TP-82080)
p0604 AB2-33445

DEBIBO6, L.
Recent developments in wing with stores flutter suppression
(O AEA TP NO. 1961-165)
p0225 AB2-20407

DEBIBO6, L.
Investigation of the unsteady airloads on a transport aircraft type airfoil with two interchangeable oscillating trailing edge flaps, at transonic speed and high Reynolds numbers
p0507 AB2-40909

DEBIBO6, L.
A preliminary laboratory evaluation of a reconfigurable integrated flight control concept
(AIAA 82-1597)
p0405 AB2-35902

DEBIBO6, L.
Development of a clear air radar to detect meteorological hazards at airports
(AI0-100534)
p0260 AB2-18035

DEBIBO6, L.
Aerodynamics of tactical weapons to Mach number 8 and angle-of-attack of 180 deg
(AIAA PAPER 82-0250)
p0118 AB2-17866

DEBIBO6, L.
Advanced attack helicopter fatigue testing - Overview
p0240 AB2-24720

DEBIBO6, L.
An improved propulsion system simulation technique for scaled wind tunnel model testing of advanced fighters
p0517 AB2-41019

DEBIBO6, L.
Development of a tapered random vibration technique for acceptance testing
p0345 AB2-22171

DEBIBO6, S. G.
Results of experimental study of heat transfer to turbine blades with porous cooling
p0104 AB2-11446

DEBIBO6, J.
Digital simulation of aircraft electrical generating system by means of Sceptre program
p0073 AB2-14820

DEBIBO6, J.
Analysis and tolerance study of an array antenna for a new generation of secondary radars
p0162 AB2-19521

DEBIBO6, J.
Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure
p0032 AB2-11006

DEBIBO6, J.
A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion
p0032 AB2-11007

DEBIBO6, J.
Study of air compressor hazards in underground and surface mines
(FPB-82-105164)
p0214 AB2-17597

DEBIBO6, E.
Energy savings with today's technology
p0111 AB2-17262

DEBIBO6, E.
Operational and performance aspects of fuel management in civil aircraft
p0169 AB2-20518

DEBIBO6, E.
Current techniques for jet engine test cell modeling
(AIAA PAPER 82-1272)
p0439 AB2-37712

DEBIBO6, E.
DOBAS, B. G.  
Secondary radar problems - The presence of false echoes  
p0242 A82-25323

DOBBS, B. C.  
Logic analysis of installation effects on turboprop noise  
[NASA-TN-62924]  
p0574 A82-32082

DOWET, C.  
The influence of protective treatment on the mechanical properties of superalloy parts  
p0346 A82-22180

DUBLING, H. R.  
An analysis of antenna communication requirements in fading media  
p0176 A82-20695

DUNSTON, D. L.  
Concept definition and aerodynamic technology studies for single-engine 7/STOL fighter/attack aircraft  
[AIAA PAPER 81-2647]  
p0157 A82-19216

DOSS, D. B.  
Inlet and airframe compatibility for a 7/STOL fighter/attack aircraft with top-mounted inlets  
p0507 A82-40908

DUNA, D.  
Investigation of subsonic nozzle performance improvement concept  
[AIAA PAPER 82-1042]  
p0437 A82-37676

DUSTEBERRY, J. C.  
Status and capabilities of the National Full Scale Facility 40-by 80-foot wind tunnel modification  
[AIAA 82-0607]  
p0238 A82-24676

DUVAL, R. L.  
Applications of system identification methods to the prediction of helicopter stability, control and handling characteristics  
p0367 A82-23230

DUVAL, R. M.  
The use of frequency methods in rotorcraft system identification  
[AIAA PAPER 81-2386]  
p0064 A82-14392

DUNN, R. D.  
A history of aeronautics and aviation in Russia - In the period up to 1914 /2nd revised and enlarged edition/  
p0544 A82-42066

DUDIC, J. J.  
Hydraulic Universal Display Processor System (HUDPS)  
[AD-A114420]  
p0525 A82-28294

DUNST, L.  
Transonic flows in an air inlet with large incidence and the effect of a blowing trap  
p0094 A82-13071

DYRES, P. J.  
Development and demonstration of manufacturing processes for fabricating graphite/LARC 160 polyimide structural elements  
[NASA-CR-165809]  
p0357 A82-22315

Dzhurinsky, G.  
A simplified wing procedure in connection with the lifting line theory and the doublet-lattice method  
p0154 A82-19195

EBBLE, R. V.  
Propulsion study for Small Transport Aircraft Technology (STAT)  
[NASA-CR-165499]  
p0027 A82-10037

EBS, E. B.  
SAF onboard flight computer system architecture and qualification  
[AIAA 81-2107]  
p0001 A82-10082

EBSGN, H. B.  
Development of a clear air radar to detect meteorological hazards at airports  
[AD-A118236]  
p0260 A82-18085

EAGLEPH, C. S.  
A new all-purpose digital flight data recorder  
p0901 A82-25177

EAST, L.  
A further study of helicopter rotor pitch-flap-phase coupling  
[BD-259]  
p0265 A82-19214

EAST, L. P.  
The design of a jet catcher  
[SAE-TN-AERO-189]  
p0135 A82-14102

EASTMAN, G.  
Why safety  
A82-19195

EASTMAN, H. L.  
Air service, airport access and future technology  
[Philadelphia]  
p0110 A82-17277

EATON, L. H.  
Development of low models for use in ceramic gas path seal applications  
[NASA-CR-169468]  
p0027 A82-10039

EAY, K.  
Photointerpretation key for pine regeneration analysis using high-altitude color infrared panoramic photography  
[PB82-30606]  
p0562 A82-30606

EATON, B. N.  
Coatings in the aero gas turbine  
[PB82-12124]  
p0318 A82-21204

EBERS, L.  
Rescue at sea  
p0078 A82-18956

EBERS, L.  
Laboratory and flight test of a new ALG strapdown IRS  
p0123 A82-18150

ECLES, K. S.  
Digital full authority controls for helicopter engines  
p0499 A82-00522

ECEA, L.  
Design of finite element grids for the computation of the three-dimensional transonic flow around a wing  
[AIAA PAPER 82-1019]  
p0375 A82-31972

EDELMAN, G. J.  
Tactical STOL moment balance through innovative configuration technology  
[AIAA PAPER 81-2615]  
p0155 A82-19204

EECKER, L.  
Laminar flow control SPP/08 feasibility demonstration  
[NASA-CR-165818]  
p0322 A82-21532

KESTON, C. T.  
Design considerations and experiences in the use of composite material for an aeronautical research wing  
[AIAA 82-0678]  
p0238 A82-30196

KESTON, C.  
Design considerations and experiences in the use of composite material for an aeronautical research wing  
[NASA-TM-83291]  
p0523 A82-28280

EDFELT, M. M.  
A two-dimensional boundary-layer program for turbine airfoil heat transfer calculation  
[AIAA PAPER 82-07-93]  
p0242 A82-35336

EDG, R. C.  
Molten gradient considerations in environmental fatigue of CF/EP  
p0578 A82-05479

EDG, R. L.  
Weather impact on low-altitude imaging infrared sensors in Europe - In availability model  
p0072 A82-14779

EDGEBOROUGH, R. W.  
Northeast corridor helicopter area navigation accuracy evaluation  
[AD-A119495]  
p0606 A82-33367

EDGEBOROUGH, R. W.  
The US AF Test Pilot School high angle of attack and spin training program  
p0076 A82-14932

EDEW, C.  
Advanced internal cargo system concept demonstration and evaluation  
[AD-A11990]  
p0451 A82-26282

EDWARDS, D. B.  
Vibration test procedures for accessory angle drive gearboxes on atar 9C engines  
[AD-A05269]  
p0080 A82-12076

EDWARDS, J.  
Apparatus for damping operator induced oscillations of a controlled system  
[NASA-CSE-PRC-1104-1]  
p0259 A82-18493

EDWARDS, C. M.  
Time-marching transonic flutter solutions including angle-of-attack effects  
[NASA-TM-83295]  
p0363 A82-23196
Elliott, R. M.

Spiral slotted phased antenna array

[AD-A115724] p0552 A82-43659

Development of a correlated finite element dynamic model of a complete aero engine

[AIAA PAPER 81-1227-74] p0161 A82-19236

Development of a correlated finite element dynamic model of a complete aero engine

[FMK-890061] p0355 A82-22272

Harpoon missile captive-carry dynamic environments on the A-52 aircraft

[AD-A115724] p0583 A82-47072

Aerostatic/quadrotor evaluation by thermal field detection, phase I: Fundamental information and basic technique development

[AD-A115724] p0595 A82-32425

Quality optimization and unification of aviation gaslines

[AD-A115724] p0081 A82-15721

An experimental investigation of interfacial temperatures in blade-seal material rubbing of aircraft compressors

[AIAA PAPER 82-0090] p0373 A82-31991

How the helicopter cockpit designer uses digital avionics

[AD-A115724] p0091 A82-13049

Minimum cost atmospheric cruise control - most efficient aircraft for a given wind component

[AIAA PAPER 82-0341] p0119 A82-17895

Comparison of different nozzle concepts for a reheated turbfans

[AD-A115724] p0094 A82-13077

A safety appraisal of the air traffic control system

[AD-A115724] p0096 A82-33366

FREEWOLDSON, L. M.

Flight test experience with high-alpha control system techniques on the F-15 airplane

[AIAA PAPER 81-2505] p0057 A82-13906

Experience with flight test trajectory guidance

[AIAA PAPER 81-2504] p0063 A82-14179

Limited evaluation of an F-14A airplane utilizing an all-disc-radar interconnect control system in the landing configuration

[AIAA-TN-81972] p0100 A82-13146

Not instatically pressurized manufacture of high strength A356 T6 disk and seal shapes

[AIAA-G-16594] p0458 A82-26439

EBELMANN, J. J.

Coupled fluid/structure response predictions for soft body impact of airfoil configurations

p0018 A82-12039

RECHELER, E. F.

Status and capabilities of the National Full Scale Facility 80- by 80-foot wind tunnel modification

[AIAA 82-0607] p0230 A82-24676

ENGLER, J. M.

An advanced programmable/reconfigurable color graphics display system for crew station technology research

[AIAA 81-2314] p0051 A82-13516

ENGLER, R. J.

Development of the Circulation Control Wing-Up
er Surface Blowing powered-lift system for STOL aircraft

[AD-A00491] p0512 A82-40968

Development of an advanced no-moving-parts high-lift airfoil

[AD-A115714] p0512 A82-40971

Static investigation of the circulation control wing/upper surface blowing concept applied to the quiet short haul research aircraft

[AIAA-78-04232] p0586 A82-32434

ENGLER, J. M.; EM. Jr.

Crack growth behavior of center-cracked panels under random spectra loading

p0169 A82-20511

ENGLER, R. M.

Geometric method for flow field measurements in wind tunnel tests

p0166 A82-20046

ENGLER, R. M.

Quality optimization and unification of aviation gaslines

p0081 A82-15721

EISENBRAT, G. V.

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

p0128 A82-16596

ESSEL, H. J.

Potentiality assessment of a parallel structure for the solution of partial differential equations

p0383 A82-33628

ESKOW, P. H.; Jr.

Distributed data processing: What is it?

p0196 A82-17087

EPITANOY, V. M.

“End losses in turbine cascades with porous cooling

p0014 A82-13434

EPPEL, J. C.

Quiet short-haul research aircraft familiarization

[AIAA-82-0129] p0026 A82-10031

Static investigation of the circulation control wing/upper surface blowing concept applied to the quiet short haul research aircraft

[AIAA-78-04232] p0586 A82-32434

EPSTEIN, C.

Taking the drag out of bombs

p0548 A82-42809

ERB, L. M.

15-15 - Foretelling things to come

p0385 A82-33916

ERDANSA, E.

A simple hybrid visual simulation for research flight simulators

[ESA-TT-690] p0210 A82-17232

Equipment for testing and measuring a "helmet mounted sight and display" system with a coupled movable TV camera in the flight simulator for research of the DFVLR

[AIAA-TT-675] p0266 A82-19219
FALCHBBO, O.
FAIB. P. S.
FALL. B. L.
FAIBSKI, B. Dw
FAIBUB, B. 0.
FAIB CHILD, B. C.
FAIB, Dw
FABIB, 6. fl.
FABOHHI. J. A,
FAEEIAHo. p.
FACE, J* 0.
FABBIS, G.
FABIAB, H.
BilBS, 0. J.
FAIBFAX. B. K.

Overview of the O'Hare Runway configuration
Application of the ONEB dynamic stall model to a
Aerodynamic characteristics of a large-scale, tmn
Analysis of data from a mnd tunnel investigation
Ground effect hover characteristics of a
Information technology and its impact on test and
Design study for a Ion-distortion holographic HDD
Evaluation of plasma source spectrometers for the
Research and development on near metal analysis
Experimental investigation of aeroelastic
Investigation of spray characteristics for
A critical appraisal of some current incidence

CAIAA PAPEB 81-2509 \ p0155 A82-19201
[ONEBA, TP NO. 1981-89] p0062 482-18161
PERSONAL AUTHOR INDEX

[ASA PAPER 82-GT-270] p0429 A82-35466
CP6 jet engine performance improvement: High pressure turbine roundness
[BASA-CR-16555] p0203 A82-17174
CP6 jet engine performance improvement: High pressure turbine active clearance control
[BASA-CR-16556] p0526 A82-28927
The CP6 jet engine performance improvement: Low pressure turbine active clearance control
[BASA-CR-16557] p0610 A82-33393

PAUCLER, R. M.
The cost of noise reduction for departure and arrival operations of commercial tilt rotor aircraft
[BASA-CR-137003] p0535 A82-29316

PAULS, N. A.
Prediction of aircraft interior noise using the statistical energy analysis method
[ASA PAPER 81-DJN-102] p0161 A82-19332

PAULSON, D.
Induced drag transonic wind tunnel T2: Operation at room temperature and cryogenic adaptation
p0262 A82-19158

PASE, J. S.
Application of fatigue, crack propagation and strain survey testing to the CB-46 aft rotor drive shaft
p0238 A82-24705

PASSE, L. R.
An experimental and numerical study of 3-D rotor wakes in hovering flight
p0510 A82-40346

PATERSON, G. L.
Air cooling of gas turbine blades
p0390 A82-34700

PAUW, J. E.
The benefits of data exchange
[FAE-90048] p0332 A82-22095

PAUA, J. O.
NASA Broad Specification Fuels Combustion Technology program - Pratt and Whitney Aircraft Phase I results and status
[ASA PAPER 82-1088] p0416 A82-34999
NASA/General Electric broad-specification fuels combustion technology program - Phase I results and status
[ASA PAPER 82-1089] p0416 A82-35000

PEDERSEN, K. J.
Memory requirements for future navigation systems
p0022 A82-12637

PEERDECEER, L. Y.
Problems of numerical simulation of unsteady three-dimensional viscous-gas flows in nozzles
p0262 A82-25347

PEERICK, K. M.
Mathematical modeling of unsteady separated flow past solid airfoil cascades
p0378 A82-32801

PEERDOINT, K. R.
Automated calculation of the stressed state of shell systems under asymmetrical mechanical and thermal loadings
p0165 A82-19928

PEID, J. F.
An aerodynamic design method for transonic axial flow compressor stage
p0032 A82-10984

PEIPMANN, E. K.
Development and evaluation of automatic landing control laws for light wing landing STOL aircraft
[BASA-CR-16160] p0203 A82-10043

PEJJE, U. G.
Acoustic emission inspection of aircraft engine turbine blades for intergranular corrosion
p0544 A82-41914

PELLET, E. J.
Aircraft energy conservation during airport ground operations
[40-416130] p0589 A82-32352

PELLER, W. J.
Tail configurations for highly maneuverable combat aircraft
p0340 A82-22201

PELLE, G. E.
The effect of journal misalignment on the oil-film forces generated in a squeeze-film damper
[ASA PAPER 82-GT-285] p0430 A82-35457

PENHELL, P. J.
Integrated airframe propulsion control
[BASA-CR-36/6] p0593 A82-32382

PETERSON, C. E.
Aircraft fire safety research with antiicing fuels - Status report
[ASA PAPER 82-1235] p0418 A82-35076

PERRY, H. M.
Model test and full scale checkout of dry-cooled jet pump sound suppressors
[ASA PAPER 82-1239] p0418 A82-35079

PERGAMON, G. M.
Techniques suitable for a portable wear metal analyzer
[AD-411352] p0411 A82-25488

PERLIN, J. E.
Crack growth evaluation of a method to convert real-time load histories to a simplified engineering spectra
p0158 A82-12043

PERLAK, E.
A criterion for determining the canons of wind shear at NASA's Basque airport, on the basis of statistical data from barograph records
p0060 A82-15468

PETERS, R.
The use of adaptive control for helicopter trajectory in search operations
p0156 A82-19065

PETERS, J. P.
Computer-in-control selection logic for a triplex digital flight control system
[BASA-CR-81-2236] p0047 A82-13465

PETERS, W. M.
Application of a microprocessor controlled cockpit display for enhanced pilot control of flight test maneuvers
[ASA PAPER 81-2510] p0057 A82-13908

PEETERS, J. J.
Engine dynamic analysis with general nonlinear finite element codes. II - Bearing element implementation, overall numerical characteristics and benchmarking
[BASA-CR-16794] p0609 A82-33390

PETTER, J. L.
Real-Time Simulation Computation System
p0158 A82-19260

PETRELL, R. K.
Consideration of mechanical, physical, and chemical properties in bearing selection for landing gear of large transport aircraft
[ASL PREPRINT 81-IC-29-3] p0126 A82-18412

PETTIT, R.
Aircraft post-crash fire fighting/rescue
p0533 A82-29287

PETTEN, J. L.
Community sensitivity to changes in aircraft noise exposure
[BASA-CR-3490] p0194 A82-16807

PETTEN, E. C., J.B.
Transverse electric waves for VLP/LF communication between aircraft
[AP-411534] p0596 A82-32502

PEIFFER, J. F.
A supersonic VSTOL fighter design project
p0546 A82-42545

PEDELL, J. M.
Comparing the relationships between noise level and annoyance in different surveys - a railway noise vs. aircraft and road traffic comparison
p0329 A82-29165

PELLENK, S. F.
Computer graphics for aircraft control
[BASA-CR-13515] p0051 A82-13515

PEZZI, L. M.
Cryogenic turbine testing
[ASA PAPER 82-GT-113] p0425 A82-35466

PETTEN, J. L.
Maneuver dependent component error models and synchronizing reset filters for inertial navigation systems
p0122 A82-18139

B-43
PISHER, J. J.
- The Navy F/A-18 Hornet electromagnetic compatibility program

PISHER, J. A.
- The impact of missions on the preliminary design of an ABC rotor

PISHER, V. A.
- Engine controls for the 1980s and 1990s

PISHER, W.
- Conversion of centrifugal compressor performance curves considering non-similar flow conditions

PITKARI, J. H.
- Can low-speed jet noise be predicted

FITZHARD, B. M.
- Development in boundary layer Throat Vector Control

FITZIMONS, R. A.
- How large should a commuter transport be

FLAIG, J. G.
- Performance evaluation of a kinesthetic-tactile display

FLANDERS, B.
- Cold regions testing of an air transportable shelter

FLANHELLY, W. G.
- Structural system identification technology verification

FLEET, J.
- Prediction of aerodynamically induced vibrations in turbomachinery blading

FLAIS, F. J.
- Technology living

FLAUNSTEIN, S. J.
- Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing

FISHER, R. A.
- A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport

FIHCK, J. L.
- Forecasting corrosion damage and maintenance costs for large aircraft

FIHKE, J. L.
- Multiple aircraft tracking system for coordinated research missions

FIHKE, B.
- Power systems

FIHKE, D. V.
- A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport

FIHKE, F.
- The use of differential pressure feedback in an automatic flight control system

FIHKE, B. A.
- Evaluation of graphite/epoxy shims in a high capacity laminate helicopter bearing

FISCHER, A.
- Some aerodynamic aspects of hang gliding

FISCHER, W. A.
- Aeronautical Information Data Subsystem (AIDS): A ground-based component of air navigation services systems

FISCHER, B. A.
- ACTRA: Investigation of new piloting and flight control technologies. Volume 1: Review; active wing

FISCHER, B.
- Abrasion resistant coated plastic products for aircraft

FISCHER, R. B.
- Experimental and analytical studies of advanced air cushion landing systems

FISCHER, L. D.
- NASA research in supersonic propulsors - a decade of progress

FISCHER, B. D.
- Analysis of the characteristics of a bypass engine, with allowance for variable pressure losses in the channels

FISCHER, B. D.
- Turbodrusters hazards flight research - Program overview

FISCHER, C. P.
- A laboratory mock-up ultrasonic inspection system for composites

FISCHER, R. L.
-Brittle materials design, high temperature gas turbine
Mathematical model for the maintenance program of modern jet aircraft [AIAA PAPER 82-1057] p0015 A82-34982

Gallo, J. P.
Automation of radome performance evaluation in the Radio Frequency Simulation System /RFSS/ at MCOB p0281 A82-26471

Gallo, B. J.
The effect of non-linear propagation in jet noise [AIAA PAPER 82-0259] p0118 A82-17867

Gallo, R. A.
Assessment of community response to high-energy impulsive sounds [AD-A110110] p0322 A82-21777

Garbell, J. M.
The WSI real-time aviation weather information system - An alternative to standard general aviation weather briefing procedures p0580 A82-45834

Garble, W. L.
Development of counter-rotating interhaft support bearing technology for aircraft gas turbine engines [AIAA PAPER 82-1054] p0437 A82-37679

Garbo, R. M.
Thermodynamics of organic compounds [AD-A10430] p0318 A82-21202

Garbo, N.
Transport aircraft crash dynamics [NASA CR-165501] p0394 A82-24186

Garikani, S. T.
Determination of rotor wake induced empennage airloads [NASA CR-165893] p0565 A82-31295

Ganesh, H. P.
The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades p0991 A82-39263

Gao, L.-L.
Effect of the rear stage casing treatment on the overall performance of a multiaxiial axial-flow compressor [AIAA PAPER 81-06-110] p0424 A82-35364

Gao, G. H.
On computing Floquet transition matrices of rotorcraft p0013 A82-11225

Gao, C. W.
Sensitivity of helicopter aeromechanical stability to dynamic inflow p0273 A82-25773

Garberdian, P.
Design of supercritical swept wings p0223 A82-23826

Garavaglia, A.
Design Criteria of the A 129 helicopter drive system p0208 A82-17215

Garboglio, J. L.
Optimization of compressor vane and bleed settings [AIAA PAPER 82-02-81] p0423 A82-35327
GLOVER, R. D.
Aircraft interrogator and display system: A ground support equipment for digital flight systems [NASA-TR-81370]
p0314 882-21175

GLIUCH, D. P.
The residue-measure criterion for model reduction in the analysis of the NASA Space Shuttle's digital flight control system [AIAA PAPER 82-0369] p0120 882-17909

GLUSHKO, N. L.
Survey and design of airfields p0552 882-43603

Goad, W. L.
Seeing through flows in Langley’s 0.3-meter Transonic Cryogenic Tunnel p0597 882-32678
Flow field studies using holographic interferometry at Langley p0598 882-32682

GOOD, E.

GOFF, K. F.
Microwave systems for radar guided missiles p0150 882-18936

GOODSON, R.
Selecting the best reduction gear concept for prop-fan propulsion systems [AIAA PAPER 82-1124] p0417 882-35020

GOEL, S. C.
A preliminary laboratory evaluation of a reconfigurable integrated flight control concept [AIAA 82-1097] p0405 882-38082

GOELE, W.
Tethered rotorcraft and their mission potential p0248 882-18145

GOELNER, E.

GOTTING, H. M.
Mathematical model for the maintenance program of modern jet aircraft [DFVLR-PS-81-14] p0025 882-10002
Mathematical model for a maintenance program for modern jet aircraft [ESA-CT-724] p0585 882-32308

GOETZ, G.
Construction and testing of an Omega navigation system for the balloon-borne x-ray experiment p0599 882-43111

GOFF, R. C.
Communicating critical weather information to pilots [AIAA PAPER 82-0016] p0205 882-27082

GOE, T.
Analysis of in-trail following dynamics of CPDI-equipped aircraft [AIAA PAPER 82-1280] p0488 882-39107
An investigation of automatic guidance concepts to steer a TVOL aircraft to a small aviation facility [NASA-CH-152407] p0191 882-16087
Functional design to support CPDI/DABS flight experiments [NASA-CH-156947] p0569 882-31326

GOED, C.
A look at the Hoffman Triangular parachute - The first successful glidable parachute p0079 882-14966

GOLD, P.

GOODING, R.
Extending the limits of reliability theory [AIAA PAPER 82-1230] p0020 882-12316

GOODING, J. M.
The SIFT computer and its development [AIAA 81-2278] p0049 882-13490

GOODER, J. H.
Start response of commercial jet aircraft including effects of autopilot operation [NASA-CH-165919] p0522 882-28266

GOLDBERGEN, A. H.
Army's 1st IPI program begins - Blisk impeller

GOODMAN, L. V.
followup p0377 882-31999

GOLDEN, L. E.
Conformal antenna array design handbook [AD-A110091] p0322 882-21403

GOODMAN, L.
Resonance tests on a Piper PA-32 tailplane before and after damage [AD-A166273] p0109 882-16071

GOLDBERGEN, A.

GOLDMICH, R. M.
Mathematical models for the synthesis and optimization of spiral bevel gear tooth surfaces [NASA-CH-3553] p0412 882-25516
Kinematic precision of gear trains [NASA-TP-28027] p0599 882-32733

GOLDSMITH, R. M.
Effects of intake geometry on circular pitot intake performance at zero and low forward speeds p0093 882-13070

GOLDIN, A.
A study to define the research and technology requirements for advanced turbo/profan transport aircraft [NASA-CH-166138] p0254 882-10202
Advanced turboprop testbed systems study [NASA-CH-167695] p0607 882-33375

GOLDSTEIN, W. H.
VTOL and VSTOL handling qualities specifications, an overview of the current status p0364 882-23209

GOLDSTEIN, H.
High frequency sound emission from moving point multipoles sources embedded in arbitrary transversely sheared mean flows p0277 882-26318

GOLDSMITH, R. J.
Local heat transfer to staggered arrays of impinging circular air jets [AIAA PAPER 82-GT-211] p0427 882-35401

GOLDSMITH, R. M.
Synthetic aperture radar target simulator [NASA-CASE-NPO-15024-1] p0031 882-10286

GOLLAS, H. M.
Radionavigation equipment of aircraft - Devices and operation p0202 882-26500

GOLOB, J.
SIMAR - An air battle simulation of the USAF Tactical Air Control System / TACS/ with Advanced Tactical Radars p0150 882-19256

GOOBY, B.
A synthesis technique for highly uncertain and interacting multivariable flight control systems p0074 882-18827

GOLDBERGEN, R. P.
Dispersion and temperature-force dependence of the high-temperature strength characteristics of a gas-turbine engine disk alloy p0182 882-21636

GOLDBERGEN, W. P.
Study of the load-carrying capacity of aviation gas-turbine engine impellers under low-cycle loading at normal- and high-temperature p0081 882-15482

GOLTER, G.

GOOD, W. B.
Thermodynamics of organic compounds [AD-8110630] p0318 882-21202

GOODCHILD, B.
Moving target detector/airport surveillance radar [ASA-7] field evaluation [AD-105196] p0090 882-12303

GOODBERGEN, P. H.
Flow field studies using holographic interferometry at Langley p0598 882-32682

GOODMAN, L. H.
Sealed lead-acid batteries for aircraft applications p0015 882-11716
B-52

GBS, D.

Calibrated and uncalibrated inertial navigation system performance in valid and jammed global positioning system environments. The external balance system of the German-Dutch windtunnel DW and its strain gage load cells. Experiments on propeller noise.

GBS, E.


GBS, F.

Techniques for interfacing multiplex systems. Techniques for interfacing multiplex systems. Unresolved problems of nickel cadmium batteries.

GBS, G.

A wind-tunnel study of the aerodynamic characteristics of a blunted versus smooth-skin supercritical-wing [AIAA 82-064]. The Center Weather Service Unit program /CWSU/. Weather support for helicopter operations in the Gulf of Mexico.

GBS, H.


GBS, I.

A spinoff in tropical forests - A new approach using the laser APB. An analytical methodology to predict potential aircraft losses due to canopy birdstrikes. Overview of flight and ground testing with emphasis on the wind tunnel [AIAA PAPER 81-2474].

GBS, J.

Development of maintenance programs through the functional, structural and flight test phases. Automated calculation of the stressed state of shell systems under asymmetrical mechanical and thermal loading. Flown by: The flight management computer [SNIAS-C21-111-110].

GBS, K.

Theoretical and experimental investigations of wind tunnel interference due to angle of attack [AIAA 82-0540]. Theoretical and experimental investigations of wind tunnel interference due to angle of attack [AIAA 82-0540].

GBS, L.

Automated calculation of the stressed state of shell systems under asymmetrical mechanical and thermal loading. Theoretical and experimental investigations of wind tunnel interference due to angle of attack [AIAA 82-0540].

GBS, M.


GBS, N.


GBS, O.

The reliability and safety of small passenger aircraft. The effect of temperature-time factors on the sensitivity of bonded and bolted joints in composites to load/environmental spectrum variations.
### PERSONAL AUTHOR INDEX

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUTHERBERG, O. A.</td>
<td>Effect of facility variation on the acoustic characteristics of three single stress nozzles (NASA-TN-16535)</td>
</tr>
<tr>
<td>GUTHERBERG, O. A.</td>
<td>Increased capability of the Langley Mach 7 Scramjet Test Facility ([AIAA PAPER 82-1240])</td>
</tr>
<tr>
<td>GUTHERBERG, O. A.</td>
<td>Sound transmission through ducts and aircraft noise prediction, Volume 1 (AD-A115783)</td>
</tr>
<tr>
<td>HAAS, J. E.</td>
<td>The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine (ASME PAPER 82-GT-222)</td>
</tr>
<tr>
<td>HAAS, J. E.</td>
<td>Comparison of experimental and analytical performance for contoured endwall stators (AIAA PAPER 82-1266)</td>
</tr>
<tr>
<td>HAAS, J. E.</td>
<td>Comparison of experimental and analytical performance for contoured endwall stators (NASA-TN-2077)</td>
</tr>
<tr>
<td>HAAS, J. E.</td>
<td>Pavement management and rehabilitation of Portland cement concrete pavements (PB82-131384)</td>
</tr>
<tr>
<td>HABEYER, W.</td>
<td>Wing design for light transport aircraft with improved fuel economy (AD-A119413)</td>
</tr>
<tr>
<td>HABERMANN, D. M.</td>
<td>The use of a multi-degree-of-freedom dual balance system to measure cross and cross-coupling derivatives (AIAA 82-0955)</td>
</tr>
<tr>
<td>HACKE, R.</td>
<td>Elastic suspension of a wind tunnel test section (AIAA 82-23263)</td>
</tr>
<tr>
<td>HACETT, J. E.</td>
<td>Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations (NASA-CR-166166)</td>
</tr>
<tr>
<td>HADDOCK, R. E.</td>
<td>Design and analysis of advanced composite structures (AD-A119413)</td>
</tr>
<tr>
<td>HADEMANN, L. F.</td>
<td>Investigation of the application of a cryogenic blending process to produce antiicing diesel fuels (AD-A110971)</td>
</tr>
<tr>
<td>HADDELOOON, J. L.</td>
<td>Implementation of the recommendations made on the technical report titled analysis of advanced simulator for pilot training (AD-A110779)</td>
</tr>
<tr>
<td>HAREL, L. E.</td>
<td>Investigations of the separation behavior on airfoils at high angles of attack, using linear lift theory (ASME-PF-117/S/PUB/37)</td>
</tr>
<tr>
<td>HARRIS, L.</td>
<td>Process and procedural approaches used in the manufacturing of the supporting structure and the demonstration of the airworthiness (AD-A119413)</td>
</tr>
<tr>
<td>HARRIS, L.</td>
<td>Integration of complex systems in current and future aircraft projects for the example of aviation (AD-A119413)</td>
</tr>
</tbody>
</table>

### B-56
A concept for a fuel efficient flight planning aid for general aviation
(HASA-CA-35133) p0266 A82-19217

HAXBY, J. E.
Heavy rain penalties for a flight simulator
[AIAA PAPER 82-0213] p0286 A82-27093
Heavy rain/wind shear accidents
p0580 A82-45825

HAXBY, P. L.
The effect of very heavy rain upon aircraft and its role in wind shear accidents
p0901 B82-25175
Aerodynamic penalties of heavy rain on a landing aircraft
[HASA-CR-156885] p0558 B82-30298

HAKANSON, J. E.
Initial P-18 carrier suitability testing
p0176 A82-20752

HALFORD, C. B.
Turbine blade nonlinear structural and life analyses
[AIAA PAPER 82-1056] p0415 A82-36981
Nonlinear structural and life analyses of a combustor liner
[HAPA-TH-82846] p0399 B82-24501

HALL, D. M.
The gas turbine engine
p0325 A82-25807

HALL, F. A.
Direct comparison of community response to road traffic noise and to aircraft noise
p0218 B82-22974

HALL, F. E.
Economic analysis for data base management
p0545 A82-42208
HALFORD, C. B.
Computer Monitored Inspection Program /CMIP/, a key to increased aircraft and personal productivity
p0545 A82-42217

HALFORD, N. D.
Principles of achieving damage tolerance with flexible maintenance programs for new and aging aircraft
p0517 B82-41016

HALFORD, J. G.
Digital flight controls
p0261 B82-19143

HALFORD, J. M.
Advanced target acquisition and tracking concepts for real time applications
p0472 B82-27305

HALFORD, L. A.
Analyzing stable pad disturbances and design of a sensor vault to monitor pad stability
[AIAA 82-1505] p0486 A82-39011

HALFORD, L. W., Jr.
The preparation and characterization of mixtures of polyfuran derivatives as solid rocket fuels
[AD-115075] p0560 B82-30414

HALFORD, M. L.
Acoustic emission from free jets
p0359 B82-22962
HALFORD, R. L.
F-16 active flutter suppression program
p0444 B82-37947

HALFORD, R. L.
Commercial HRS considerations for small gas turbine engines
p0020 A82-12469

HALFORD, J. B.
Longitudinal and lateral static stability and control characteristics of a 1/6-scale model of a remotely piloted research vehicle with a supercritical wing
[HASA-TP-1360] p0145 B82-15075

HALFORD, D. G.
Aerodynamic considerations in the prediction of unstalled supercruise flutter in transonic fans
p0143 B82-15058

HALFORD, J. E.
Chicago aerostatic acoustic vortex sensing system,
Volume 2: Decay of B-707 and DC-8 vortices
[AD-1196951] p0302 B82-20157

HALFORD, P. S.
Automated cadence performance evaluation in the Radio Frequency Simulation System /RFSS/

HALL, D. B.
Initial B-18 carrier suitability testing

HALFORD, C. B.
Total main rotor isolation system
[ARID PREPRINT 81-15] p0402 A82-37707
HALFORD, C. B.
Development of a digital integrated automatic landing system /DIALS/ for steep approach and landing
p0168 A82-20297

HALFORD, R. D.
Effects of dynamic stall on SWEC
p0384 A82-33707

HALFORD, J. B.
A simple system for helicopter individual-blade-control and its application to stall flutter suppression
p0439 A82-37765

HALFORD, J. B.
A simple system for helicopter individual-blade-control and its application to stall-induced vibration alleviation
[ARID PREPRINT 81-12] p0402 A82-37705

HALFORD, L. S.
International aerospace review; Proceedings of the First International Aerospace Symposium, Le Bourget, Seine-Saint-Denis, France, June 2, 3, 1981
p0386 A82-34101

HALFORD, C. B.
Optimization of thrust algorithm calibration for Computing System (TCS) for thrust the NASA Highly Maneuverable Aircraft Technology (HiHAT) vehicle's propulsion system
[HASA-CA-163121] p0317 B82-21198

HALFORD, R. B.
Allocation of thrust vectoring for STOL
[AIAA PAPER 81-2816] p0155 A82-19205

HALFORD, E. G.
Highly Maneuverable Aircraft Technology (HiHAT) components, volume 1

HALFORD, W. A.
Approximate method of predicting heating on the windward side of Space Shuttle Orbiter and comparisons with flight data
[AIAA PAPER 82-0823] p0373 A82-31053

HALFORD, W. G.
Evaluation of sensitivity of ultrasonic detection of diamond in graphite/epoxy to metal joints
p0286 A82-27129
p0453 A82-27109

HALFORD, M. W.
Small helicopter crew seat vibration - Past performance, future requirements
[ARID PREPRINT 81-3] p0441 A82-37779
HALFORD, C. B.
High/low frequency critical component development program
p0287 A82-27130
HALFORD, C. B.
Evaluation of cast titanium alloy compressor components, volume 1
[AD-111431] p0286 A82-24204
HALFORD, C. B.
Committing composites to the Boeing 767
p0481 A82-38224
HALFORD, C. B.
Quantification of helicopter vibration ride qualities
p0404 A82-37767
BARRIS, E. F.
Aircraft flight control requirements
[p0294 A82-27284]

BARRIS, E. P.
The role of voice technology in advanced
civil transport operations. [AD-A108182]

BARRIS, G. H.
Light-guided information distribution systems
[AD-A1115949]

BARRIS, H. B.
Multiple-scalar turbulence modeling of free
turbulent flows
[ASEE PAPER 81-46-20]

BART-LEW, L.
Mechanically-fastened joints for advanced
civil transport operations
[p0073 A82-10834]

BART-LEW, L. J.
Cellular rubber for high performance
civil transport operations
[AAAI PAPER 82-1518]

BART, D. F.
Aircraft flight control systems
[p0497 A82-40428]

BART, H. J.
Aircraft flight control systems
[p0096 A82-13079]

BARTT, L. C.
Aircraft flight control systems
[p0578 A82-45538]

BARTT, L. L.
Aircraft flight control systems
[p0078 A82-14961]

BARTT, L. L.
Aircraft flight control systems
[p0159 A82-19268]

BARTT, L. L.
Aircraft flight control systems
[p0207 A82-17208]

BARTT, L. L.
Aircraft flight control systems
[p0327 A82-20034]

BARTT, L. L.
Aircraft flight control systems
[p0473 A82-27315]

BARTT, L. L.
Aircraft flight control systems
[p0512 A82-40969]

BARTT, L. L.
Aircraft flight control systems
[p0567 A82-14720]

BARTT, L. L.
Aircraft flight control systems
[p0578 A82-23381]

BARTT, L. L.
Aircraft flight control systems
[p0608 A82-33381]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-10844]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]

BARTT, L. L.
Aircraft flight control systems
[p0612 A82-13019]
**PERSONAL AUTHOR INDEX**

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGHTS, B. C., JK</td>
<td>Simulator study of vortex encounters by a twin-engine, commercial, jet transport airplane [NASA-TP-1966]</td>
</tr>
<tr>
<td>HAIGHT, J. J</td>
<td>An advanced programmable/reconfigurable color graphics display system for crew station technology research [AIAA 81-2314]</td>
</tr>
<tr>
<td>HAINSBY, D. B</td>
<td>A unique integrated flight testing facility for advanced control/display research [AIAA PAPER 81-2690]</td>
</tr>
<tr>
<td>HAYES, B. J</td>
<td>Experimental evaluation of a perspective tunnel display for three-dimensional helicopter approaches</td>
</tr>
<tr>
<td>HARK, D.</td>
<td>Advanced electronic displays and their potential in future transport aircraft</td>
</tr>
<tr>
<td>HARRIS, L.</td>
<td>Advanced training techniques using computer generated imagery [AD-1117979]</td>
</tr>
<tr>
<td>HATT, L. M</td>
<td>Oxidation-resistant materials for hot-gas turbines and jet engines. I</td>
</tr>
<tr>
<td>HAUN, W.</td>
<td>Investigation of blade vibration of radial impellers by means of telemetry and holographic interferometry [AIAA PAPER 82-07-34]</td>
</tr>
<tr>
<td>HAZEL, W. L</td>
<td>The influence of protective treatment on the mechanical properties of superalloy parts</td>
</tr>
<tr>
<td>HAUSER, W. D</td>
<td>Computer-program model for predicting horizontally and vertically polarized VLF atmospheric radio noise at elevated receivers [AD-109403]</td>
</tr>
<tr>
<td>HENSHAW, R. J</td>
<td>Field test of an in stack diffusion classifier on an aircraft engine test cell [AD-113831]</td>
</tr>
<tr>
<td>HENDRICKSON, B.</td>
<td>A control model for maneuvering flight for application to a computer-flight testing program</td>
</tr>
<tr>
<td>HANG, J. D</td>
<td>Subsonic 3-D surface panel method for rapid analysis of multiple geometry perturbations [AIAA PAPER 82-0993]</td>
</tr>
<tr>
<td>HAVRICK, D. B</td>
<td>The certification of digital systems</td>
</tr>
<tr>
<td>HAWKINS, R. A</td>
<td>Liquid hydrogen - An outstanding alternate fuel for transport aircraft</td>
</tr>
<tr>
<td>HAVEN, R. A</td>
<td>The potential for long-range high-payload aircraft with alternate fuels [AIAA PAPER 82-0018]</td>
</tr>
<tr>
<td>HAYS, R. L</td>
<td>The aerospace learning process [AIAA PAPER 82-1291]</td>
</tr>
<tr>
<td>HAVEMANN, B. R.</td>
<td>Solutions to the aviation fuel problem</td>
</tr>
<tr>
<td>HAWTHORN, R.</td>
<td>Take-off ground roll of propellet driven aircraft</td>
</tr>
<tr>
<td>HAVEL, D. L</td>
<td>Three navigation systems and their costs of acquiring remote sensing data</td>
</tr>
<tr>
<td>HAUGHTON, L. A</td>
<td>Preliminary airworthiness evaluations of the OH-6 with hot metal pins plus infrared suppressor and infrared jammer [AD-112023]</td>
</tr>
<tr>
<td>HESSEY, B.</td>
<td>Effect of crossflows on the discharge coefficient of film cooling holes [ASME PAPER 82-02-107]</td>
</tr>
<tr>
<td>HATASHI, T.</td>
<td>An extension of the local momentum theory to the rotors operating in twisted flow fields</td>
</tr>
<tr>
<td>HAYNES, B. W</td>
<td>Distributed intelligence for air fleet control [AD-A108611]</td>
</tr>
<tr>
<td>HAYES, C. J</td>
<td>Determination of selected distillate blending solvents in simple and complex aircraft fuel matrices via glass capillary gas chromatography [AD-A1055889]</td>
</tr>
<tr>
<td>HAYES, D.</td>
<td>Determination of pyrrolid in modified JP-4 via High Performance Liquid Chromatography (HPLC) [AD-A1055889]</td>
</tr>
<tr>
<td>HAYES, K. B</td>
<td>Kova's indexes as a tool in characterizing hydrocarbon fuels in temperature programmed glass capillary gas chromatography. Part I: Qualitative identification</td>
</tr>
<tr>
<td>HAYES, L.</td>
<td>Maximum-entropy spectral analysis of radar clutter</td>
</tr>
<tr>
<td>HAYASHI-HABER, U.</td>
<td>A mixed-flow cascade passage design procedure based on a power series expansion [ASME PAPER 82-02-121]</td>
</tr>
<tr>
<td>HEAD, B. E</td>
<td>The FAB-64 composite flexbeam tail rotor</td>
</tr>
<tr>
<td>HEAD, L. B.</td>
<td>An update of an integrated CHI system - TIES [AIAA 81-2292]</td>
</tr>
<tr>
<td>HEAD, B. D.</td>
<td>Computer architecture study for VTIS simulators [AD-A115006]</td>
</tr>
<tr>
<td>HEAD, B. E. A</td>
<td>Design of a microprocessor-controlled linkage for simulutor applications [AD-A115421]</td>
</tr>
<tr>
<td>HEAD, B. D.</td>
<td>Updated station deselection procedures to support automatic Omega receiver operation</td>
</tr>
<tr>
<td>HEADS, R. G</td>
<td>The effect of ionospheric variability on the accuracy of high frequency position location (\text{[AD-A107425]})</td>
</tr>
<tr>
<td>HEAD, T. C.</td>
<td>Accuracy expectations for gas turbine and centrifugal compressor performance testing [ASME PAPER 82-02-128]</td>
</tr>
<tr>
<td>HEAD, B. F.</td>
<td>Evaluation of a proposed modified F/FB-111 crew restraint system and a proposed restraint system (\text{[AD-110108]})</td>
</tr>
<tr>
<td>HEAD, B. D.</td>
<td>Comparative vertical impact testing of the F/FB-111 crew restraint system and a proposed modification (\text{[AD-A113957]})</td>
</tr>
<tr>
<td>HEAD, B. D.</td>
<td>Engineering aspects of international collaboration on Tornado [AD-A105401]</td>
</tr>
<tr>
<td>HEAD, B. D.</td>
<td>Chemistry of combustion of fuel-water mixtures [AD-A10851]</td>
</tr>
<tr>
<td>HEAD, B. K.</td>
<td>Computer program for analysis of spherical screen centrifugal compressor performance testing [AIAA PAPER 82-0019]</td>
</tr>
<tr>
<td>HEAD, P. F.</td>
<td>The effect of ionospheric variability on the accuracy of high frequency position location [AIAA 81-2292]</td>
</tr>
<tr>
<td>HEAD, B. D.</td>
<td>Comparative vertical impact testing of the F/FB-111 crew restraint system and a proposed modification [AD-A113957]</td>
</tr>
<tr>
<td>HECHT, J.</td>
<td>Laser gyro - The guiding light [AIAA PAPER 82-12178]</td>
</tr>
<tr>
<td>HECHT, R. L.</td>
<td>Lasers and their applications to the understanding of laser behavior [AD-A10851]</td>
</tr>
<tr>
<td>HECHT, G.</td>
<td>Carbon fiber reinforced composite structures protected with metallic surfaces against lightning strike damage [AD-A0-340-82-02]</td>
</tr>
<tr>
<td>HEDBERG, C. B.</td>
<td>Development of materials and manufacturing technology over the next 20 years: Composite materials [AD-A0-340-82-02]</td>
</tr>
<tr>
<td>HEDBERG, C. B.</td>
<td>Military maintenance policies and procedures for high temperature parts. Will they be adequate? [AD-A0-340-82-02]</td>
</tr>
</tbody>
</table>
The case for a defensive air-to-air fighter

Experimental investigation of a transonic

Accuracy expectations for gas turbine and

A series of airfoils designed by transonic drag

Transonic design using computational aerodynamics

Prototype Regional Observation and Forecast System

Past applications and future potential of variable

Aircraft energy conservation during airport ground

Experimental investigation of a transonic

Aircraft energy conservation during airport ground

Thermal-barrier-coated turbine blade study

Kelvin-Helmholtz stability analysis of air cushion

KC-10 flight test program

Analytical and experimental characterization of the

Past applications and future potential of variable

Flight experiments using the front-side control

techique during piloted approach and landing in a

anlysis of several glidepath and speed control

autopilot concepts for a powered lift STOL

Prototype Regional Observation and Forecast System

High-Altitude Imagery User Guide

Transonic design using computational aerodynamics

A series of airfoils designed by transonic drag

a general aviation simulator evaluation of a

cable-extended instrument landing system display

Accuracy expectations for gas turbine and
centrifugal compressor performance testing

Instantaneous turbulence profiles in the wake of an
oscillating airfoil

Through flow calculations in axial turbomachines

The utilization of agricultural aircraft in

economic operations for fighting forest fires in

Israel
<table>
<thead>
<tr>
<th>HOPKIN, T. L.</th>
<th>Recent applications of the transonic wing analysis computer code, WING</th>
<th>p0508 A82-40932</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOLTZ, D. E.</td>
<td>Development of new lifting parachute designs with increased trim angle</td>
<td>p0610 A82-33346</td>
</tr>
<tr>
<td>BOB., R.</td>
<td>Turbine stage heat flux measurements</td>
<td>p0006 A82-10407</td>
</tr>
<tr>
<td>HOLTZ, E.</td>
<td>Supercritical flow past symmetrical airfoils</td>
<td>p019 A82-35102</td>
</tr>
<tr>
<td>HOLTZ, L. E.</td>
<td>Development of in-can melting process and equipment, 1979 and 1980</td>
<td>p0195 A82-16383</td>
</tr>
<tr>
<td>DOLS, R. L.</td>
<td>Vapor condensation control of JP-4 emissions from underground storage tanks at March Air Force Base, California</td>
<td>p0612 A82-33354</td>
</tr>
<tr>
<td>HOBS, C. F.</td>
<td>Comments on 'Nature of inlet turbulence and strut flow disturbances and their effect on turbomachinery rotor noise'</td>
<td>p0277 A82-26320</td>
</tr>
<tr>
<td>HODKIN, W. C.</td>
<td>Velocity and flow angle measurements in the Langley 0.3-meter transonic cryogenic tunnel using a laser transit anemometer</td>
<td>p0599 A82-32697</td>
</tr>
<tr>
<td>HODG, Q.</td>
<td>Passive difference computation of the steady transonic potential flow around airplanes</td>
<td>p0031 A82-10981</td>
</tr>
<tr>
<td>HOBBO, R.</td>
<td>Study of acoustic resonance of cascades</td>
<td>p0144 A82-15048</td>
</tr>
<tr>
<td>HODS, J.</td>
<td>Multibody aircraft study, volume 1</td>
<td>p0588 A82-33246</td>
</tr>
<tr>
<td>HODS, J.</td>
<td>Multibody aircraft study, volume 2</td>
<td>p0588 A82-33245</td>
</tr>
<tr>
<td>HODG, R. V.</td>
<td>Electric Flight Systems</td>
<td>p0259 A82-26465</td>
</tr>
<tr>
<td>HODG, R. E.</td>
<td>Electric Flight Systems Integration</td>
<td>p0226 A82-19143</td>
</tr>
<tr>
<td>HODG, R. E.</td>
<td>Maintenance problems associated with the operation of the P6O2/Pegasus/ engine in the AV-8A Barrier aircraft</td>
<td>p0109 A82-16951</td>
</tr>
<tr>
<td>HOOK, P. L.</td>
<td>Aeronautical Research Laboratories Structures Division</td>
<td>p0207 A82-19161</td>
</tr>
<tr>
<td>HOFFER, R.</td>
<td>Passive terrain following using stored map and global positioning system</td>
<td>p0071 A82-14772</td>
</tr>
<tr>
<td>HOPKIN, E. D.</td>
<td>Human factors in air traffic control</td>
<td>p0530 A82-29253</td>
</tr>
<tr>
<td>HOPKIN, L. K.</td>
<td>System data communication structures for active-control transport aircraft, volume 1</td>
<td>p0538 A82-29510</td>
</tr>
<tr>
<td>HOPKIN, L. L.</td>
<td>On-board communication for active-control transport aircraft</td>
<td>p0539 A82-29511</td>
</tr>
<tr>
<td>HOPKINS, F.</td>
<td>Benefit cost analysis of the aircraft energy efficiency program</td>
<td>p0052 A82-13520</td>
</tr>
<tr>
<td>HOPKINS, G. R.</td>
<td>A generalized Hill's method for the stability analysis of parametrically excited dynamic systems</td>
<td>p0274 A82-25923</td>
</tr>
<tr>
<td>HOPKINS, J. A.</td>
<td>Integrated satellite navigation and strapdown attitude and heading reference systems for civil air carriers</td>
<td>p0223 A82-12683</td>
</tr>
<tr>
<td>HOPKINS, R. A.</td>
<td>Calibration of the Aero Anaeoic Facility Phase I: Short range plan</td>
<td>p0191 A82-16091</td>
</tr>
<tr>
<td>HOPKINS, R. W.</td>
<td>Aircraft fire mishap experience/crash fire scenario quantitation</td>
<td>p0532 A82-29280</td>
</tr>
<tr>
<td>HOPKINS, R. B.</td>
<td>Radar environment simulation for software test</td>
<td>p0159 A82-19205</td>
</tr>
<tr>
<td>HOPKINS, S. J.</td>
<td>Structural dynamics: Modified calculations</td>
<td>p0101 A82-13457</td>
</tr>
<tr>
<td>HOPKINS, L.</td>
<td>Application of multivariable model following method to flight controller</td>
<td>p0089 A82-39120</td>
</tr>
<tr>
<td>HOPKINS, R. M.</td>
<td>A new thermal and trajectory model for high altitude balloonson</td>
<td>p0077 A82-10411</td>
</tr>
<tr>
<td>HOPKINS, L. H.</td>
<td>A synthesis technique for highly uncertain and interacting multivariable flight control systems</td>
<td>p0074 A82-14827</td>
</tr>
<tr>
<td>HOPKINS, L. L.</td>
<td>Recent results in main beam nulling</td>
<td>p0553 A82-43792</td>
</tr>
<tr>
<td>HOPKINS, S. J.</td>
<td>An iterative finite element-integral technique for predicting sound radiation from turbofan inlets in steady flight</td>
<td>p0115 A82-17796</td>
</tr>
<tr>
<td>HOPKINS, H.</td>
<td>Acoustic properties of turbofan inlets</td>
<td>p0462 A82-27090</td>
</tr>
<tr>
<td>HOPKINS, R. M.</td>
<td>Preliminary analysis of the benefits and costs to implement the National Airspace System Plan</td>
<td>p0065 A82-33369</td>
</tr>
<tr>
<td>HOPKINS, L. H.</td>
<td>Sideline indication system as a fuel saving aid in jet transport aircraft operation</td>
<td>p0590 A82-33261</td>
</tr>
<tr>
<td>HOPKINS, C. C.</td>
<td>Prediction of separated asymmetric trailing-edge flows at transonic Mach numbers</td>
<td>p0375 A82-31974</td>
</tr>
<tr>
<td>HOPKINS, J. B.</td>
<td>Drag reduction using pneumatic turbulators</td>
<td>p0350 A82-22223</td>
</tr>
<tr>
<td>HOPKINS, R. G.</td>
<td>Measurements of heat transfer coefficients on gas turbine components, II - applications of the technique described in part I and comparisons with results from a conventional measuring technique and predictions</td>
<td>p0246 A82-35308</td>
</tr>
</tbody>
</table>
BELL, R. A.

Hydrogen economy assessment for long-term energy systems in Japan

p0422 A82-35311

BELL, R.

A velocity vector measuring system with 13 asymmetric wedge type yaw sensors

[NASA-TR-8487]
p0213 N82-17477

BELL, R. C.

Why trans-fuselage aircraft

p0256 N82-28276

BELL, B. A.

Evaluation of a voice recognition system for the NOTAS pseudo pilot station function

[NASA-CP-168608]
p0406 N82-25235

BELL, B. E.

The sixteen to forty micron spectroscopy from the NASA Lear jet

[NASA-CP-167341]
p0310 N82-21050

BELL, B. J.

A wind tunnel study of the flutter characteristics of composite rotor blades during fatigue testing

p0259 A82-29713

BELL, B. L.

Component design and development for future helicopter engines

p0257 N82-17209

BELL, B. U.

The status of airport noise prediction, with special reference to the United Kingdom and Europe

p0256 A82-28149

BELL, B. W.

Development and laboratory testing of a thermal emission velocimeter for application to an erosion nose tip test facility

[AD-A107713]
p0213 N82-17842

BELL, B. Y.

On the dynamic collapse of a column impacting a rigid surface

[ASAE 82-0735]
p0360 A82-30102

BELL, B. Z.

A wind tunnel study of the flutter characteristics of a supercritical wing

[NASA-AD-81002-D]
p0199 N82-17129

BELL, B. P.

Medium FPR performance analysis

p0436 A82-37378

BELL, B. G.

Analysis of side-looking airborne radar /SLAB/ performance in the detection of search and rescue targets

p0293 A82-27641

Utilization of AN/APS-94 side-looking airborne radar systems in search and rescue

[AD-A114640]
p0561 N82-30437

Preliminary assessment of US Coast Guard Short Range Recovery (SRB) Forward Looking Infrared (FLIR) system small target detection performance

[AD-A117916]
p0165 N82-34230

BELL, B. J.

Flight test of the Aircraft Fatigue Data Analysis System (AFDAS) X 2 prototype

[AD-A105270]
p0087 N82-12066

BELL, B. R.

CF6 jet engine performance improvement: High pressure turbine rounds

[NASA-CR-165555]
p0203 N82-17174

BELL, B. G.

Alternative deployment concepts for Remotely Piloted Vehicles (RPV) FLIR/TV mission payload

[AD-A117677]
p0608 N82-33379

BELL, B. E.

On the generation of side-edge flap noise

p0277 A82-26319

BELL, B. G.

Army Lynx: Product development matched to military combat development

p0247 A82-18143

BELL, B. G.

Analysis of data from a wind tunnel investigation of a large-scale model of a highly maneuverable supersonic V/STOL fighter - STOL configuration

p0155 A82-19207

BELL, B. G.

Test results of chordwise and spanwise blowing for low-speed lift augmentation

p0155 A82-60959

BELL, B. D.

The development and applications of a full-scale wide body test article to study the behavior of interior materials during a postcrash fuel fire

p0533 N82-29285

BELL, B. H.

Heads up display

[NASA-CASP-1AR-12630-1]
p0536 N82-29319

BELL, B. L.

General purpose research rotor design/PREPIRINT 81-3-

p0441 A82-37777

BELL, B. E.

Electronic/electric Technology Benefits Study

[NASA-CR-165640]
p0521 N82-28243

Aircraft alerting systems standardization study. Phase 4: Accident implications on systems design

p0069 N82-31308

BELL, B. J.

Adaptive fuel control feasibility investigation for helicopter applications

[ASAE PAPER 82-GT-205]
p0427 A82-35600

BELL, B. K.

Evaluation of aerodynamically induced vibrations in turbomachinery blading

p0327 A82-28966

BELL, B. J.

Kermit/SBN-15 polyimide matrix composite for a complex shaped DC-9 drag reduction fairing

[ASAE PAPER 82-1047]
p0437 A82-37678

BELL, B. T.

Development of hybrid gas turbine rocket technology

[ASAE PAPER 82-GT-94]
p0424 A82-35337

BELL, B. E.

Maintenance training simulator design and acquisition: ISD-derived training equipment design

[AD-A116071]
p0447 N82-26221

Maintenance training simulator design and acquisition: Handbook of ISD procedures for design and documentation

[AD-A118749]
p0457 N82-26321

BELL, B. L.

Motorcycle flight simulation computer program CB1 with DATABS interface. Volume 2: Programmer's manual

[AD-A110871]
p0258 A82-16231

BELL, B. L.

Comparison of numerical results and measured data for smooth and indented nozzles

[AD-A111794]
p0460 N82-26619

BELL, B. M.

Theoretical investigation of wing rocking

[NASA-CR-165508]
p0140 N82-15031

BELL, B. C.

Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the section analogy

[ASAE PAPER 82-1355]
p0409 A82-39161

BELL, B. C.

Aerodynamic characteristics of maneuvering flaps

p0185 A82-22110

BELL, B. C.

Flow and acoustic properties of low Reynolds number undersexpanded supersonic jets

[NASA-CR-165257]
p0557 N82-30208

BELL, B. C.

Models for the motor state of VSCF aircraft electrical power system

p0513 A82-40962

BELL, B. C.

Multifunction multimode airborne radar architecture study

[AD-A118427]
p0528 N82-28523

BELL, B. C.

The initial lift and drag of an impulsively started airfoil of finite thickness

p0390 A82-34538

Two-dimensional apparent masses for cross-flow sections of wing-store configurations

p0583 A82-46601

BELL, B. C.

The relaxation oscillation in ramjet combustion

p0236 A82-28738
BURKHARD, J. R., Jr.
Model helicopter rotor impulsive noise
p.013 A82-11300

HUBBARD, J. R.
Model helicopter rotor dynamic surface measurements on a model helicopter
rotor during blade slap at high angles of attack
p.063 A82-40555

HUBBARD, J. R.
Development of a spinning wave heat engine
p.057 A82-31320

HUBBARD, L. S.
Telemetry in aerodynamic design
p.0321 A82-21247

HUBBS, R.
Flight characteristics design and development of the ABB/RTL B1117 helicopter
p.248 A82-18150

HUGHES, C. M.
Methods and models for predicting fatigue crack growth under random loading
p.160 A82-20506

HUGHES, C. M., Jr.
Stol capability impact on advanced tactical aircraft design
p.155 A82-19206

HUGHES, C. M.
Ceramic applications in turbine engines
p.0565 A82-31158

HUGHES, V. E.
Penetration and rehabilitation of Portland cement concrete pavements
[p.042-11384]
p.357 A82-22392

HUBBARD, L. S.
Propulsion study for small transport aircraft
p.027 A82-10037

HUBBARD, L. S.
Low-speed characteristics of a fighter-type configuration at high angles-of-attack and sideslip
p.0517 A82-41020

HUBBARD, L. S.
Development of a digital integrated automatic landing system /DIALS/ for steep approach and landing
p.160 A82-20297

HUBERT, C. L.
Advanced simulation
p.171 A82-20535

HUFF, R.
Repair and regeneration of turbine blades, vanes and discs
p.346 A82-22185

HUFFMAN, J. L.
Vortext lift augmentation by suction on a 60 deg swept Gothic wing
[p.11A-PAPER 11-2341]
p.117 A82-17565

HUFFMAN, W.
Automated low-cost weather observation system
[ALMOS]
[AD-A117447]
p.614 A82-33954

HUGGINS, C.
Advanced straffed charge rotary aircraft engine design study
p.0478 A82-27743

HUGGINS, C. G.
Advanced general aviation composite engine/airframe integration study
[NASA-CR-165398]
p.350 A82-22306

HUGGINS, C. G.
Pre-design study for a modern four-bladed rotor for the Rotordynamics Research Aircraft (RRRA)
[NASA-CR-165398]
p.187 A82-16043

HUGGINS, C. G.
Accident prevention - A regulatory view
p.110 A82-17278

HUGGINS, C. W.
Low level wind shear detection system for airport landing approach areas using the Bertin Doppler acoustic scanner /Radon/
p.579 A82-45816

HUI, C. M.
Nonlinear analysis of nonlinear stability of aircraft at high angles of attack
[AAIA PAPER 82-0245]
p.117 A82-17862

HUI, C. R.
Modified version of LTRAN2: A calculation method
p.0223 A82-23820
ground test results

BUTTSBLL, L. J.
p0594 A82-42035

BUTTSBLL, C. D.
Some NPF laser velocimeter installation and operation considerations
p0599 N82-32698

BUTTSBLL, F. B.
The experience of corrosion on French military aerodynamics
p0211 N82-17355

BUDLICK, G. F.
Information technology and its impact on test and evaluation at the Naval Air Test Center
[AIAA PAPER 81-2396] p0056 A82-13894

BUDLICK, C. A.
Carbon formation by the pyrolysis of gas turbine fuels in flame regions of gas turbine combustors
[ASME PAPER 82-GT-84] p0423 A82-35330

BUDLICK, S. E.
Strategic materials - Technological trends
p0444 A82-37972

BUDLICK, C. A.
Development of the Circulation Control Wing-Upper Surface Blowing powered-lift system for STOL aircraft
p0512 A82-40969

BUDLICK, S. E.
Accurate numerical solution of compressible, linear stability equations
p0382 A82-33571

BUDLICK, S. E.
Wide angle raster head up display design and application to future single-seat fighters
p0472 N82-27308

BUDRAIDE, B. L.
Voice communications - The vital link
p0220 A82-23324

BUDSTON, W.
Study of the global positioning system for maritime concepts/applications: Study of the feasibility of replacing maritime shipborne navigation systems with NAVSTAR
[NASA-CR-169031] p0449 A82-26263

BUTTSBLL, H. M.
Buoyancy and intersection design
p0394 A82-33504

BUTTSBLL, C.
Flight test data acquisition and interpretation
p0239 A82-24707

BUTTSBLL, R. C.
Shadowgraph techniques in transonic tests with powered nacelles
p0597 N82-32674

BUTTSBLL, M. M.
Composite wing substructure technology on the AV-8B advanced aircraft
p0287 A82-27126

BUTTSBLL, L. J.
Active flutter suppression on an F-67 aircraft
[AIAA PAPER 80-0770] p0298 A82-20513

BUTTSBLL, M. E.
Singularity embedding method in potential flow calculations
[NASA-CR-166397] p0566 N82-31300

BUTTSBLL, W. C.
Test demonstration of digital control of wing/store flutter
[AIAA 82-0405] p0317 A82-30141

BUTTSBLL, M. M.
Cryogenic turbine testing
[AIAA PAPER 82-GT-113] p0425 A82-35346

BUTTSBLL, L. J.
Estimation of the efficiency of radioelectronic flight navigation systems
p0515 A82-12701

BUTTSBLL, L. J.
Determination of the glide path of an aircraft with power off
p0360 A82-34154

BUTTSBLL, L. J.
Survival from crashed Navy helicopters
p0099 A82-14979

BUTTSBLL, L. J.
Effects of high voltage transmission lines on non-directional beacon performance
[AIAA-812311] p0466 A82-27226

BUTTSBLL, L. J.
Analysis of the efficiency of radioelectronic flight navigation systems
p0515 A82-12701

BUTTSBLL, L. J.
Development of the glide path of an aircraft with power off
p0360 A82-34154

BUTTSBLL, L. J.
Survival from crashed Navy helicopters
p0279 A82-34013

BUTTSBLL, L. J.
Effects of high voltage transmission lines on non-directional beacon performance
[AIAA-812311] p0466 A82-27226

BUTTSBLL, L. J.
A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory
[NAV-81-6648] p0034 A82-11031

BUTTSBLL, L. J.
Development status of a composite vertical stabilizer for a jet trainer
p0496 A82-3989

BUTTSBLL, L. J.
Calculation of the stability of crosswise-reinforced cylindrical shells
p0120 A82-1862

BUTTSBLL, L. J.
The maximum flying range problem for an aircraft
p0342 A82-3160

BUTTSBLL, L. J.
Acoustic fatigue endurance test of USB flap structure models at elevated temperature
[NAV-81-683] p0269 A82-1957

BUTTSBLL, L. J.
The aircraft - Its application and promotional activity
p0173 A82-2055

BUTTSBLL, L. J.
Graphical display of shock wave from an inclined

PERSONAL AUTHOR INDEX

A summary of V/STOL inlet analysis methods
[AIAA-812637] p0034 A82-11031

BUTTSBLL, L. J.
Experimental investigation of turbine endwall heat transfer. Volume 1: Description of experimental hardware and test conditions
[AD-A110322] p0317 N82-21199

BUTTSBLL, L. J.
Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets
[AD-A110333] p0317 N82-21200

BUTTSBLL, L. J.
Experimental investigation of turbine endwall heat transfer. Volume 3: Data base system
[AD-A110334] p0317 N82-21201

BUTTSBLL, L. J.
The effect of critical design parameters on the selection of a VSCF system
p0230 A82-24381

BUTTSBLL, L. J.
Sport aircraft
p0498 A82-40483

BUTTSBLL, L. J.
Efficient use of working fluids in aviation hydraulic systems
p0082 A82-15724

BUTTSBLL, L. J.
Turbulent boundary layer on a porous surface with injection at various angles to the wall
p0492 A82-39482

BUTTSBLL, L. J.
Variational equation of an eccentrically reinforced panel with allowance for nonuniform heating
p0502 A82-46617

BUTTSBLL, L. J.
Structural optimization of a swept wing on the basis of the aerocore efficiency condition
p0360 A82-34145

BUTTSBLL, L. J.
The enhancement of heat exchange in channels /2nd revised and enlarged edition/
p0020 A82-12222

BUTTSBLL, L. J.
Estimation of the efficiency of radioelectronic flight navigation systems
p053 A82-13701

BUTTSBLL, L. J.
Determination of the glide path of an aircraft with power off
p0360 A82-34154

BUTTSBLL, L. J.
Survival from crashed Navy helicopters
p0079 A82-14979

BUTTSBLL, L. J.
Effects of high voltage transmission lines on non-directional beacon performance
[AIAA-812311] p0466 A82-27226

BUTTSBLL, L. J.
Analysis of the efficiency of radioelectronic flight navigation systems
p0515 A82-12701

BUTTSBLL, L. J.
Development of the glide path of an aircraft with power off
p0360 A82-34154

BUTTSBLL, L. J.
Survival from crashed Navy helicopters
p0279 A82-34013

BUTTSBLL, L. J.
Effects of high voltage transmission lines on non-directional beacon performance
[AIAA-812311] p0466 A82-27226

BUTTSBLL, L. J.
A study on numerical method for evaluating spanwise integral in subsonic lifting-surface theory
[NAV-81-6648] p0034 A82-11031

BUTTSBLL, L. J.
Development status of a composite vertical stabilizer for a jet trainer
p0496 A82-3989

BUTTSBLL, L. J.
Calculation of the stability of crosswise-reinforced cylindrical shells
p0120 A82-1862

BUTTSBLL, L. J.
The maximum flying range problem for an aircraft
p0342 A82-3160

BUTTSBLL, L. J.
Acoustic fatigue endurance test of USB flap structure models at elevated temperature
[NAV-81-683] p0269 A82-1957

BUTTSBLL, L. J.
The aircraft - Its application and promotional activity
p0173 A82-2055

BUTTSBLL, L. J.
Graphical display of shock wave from an inclined

B-68
Design possibilities for improved fuel efficiency

Performance evaluation of a kinesthetic-tactinal

Identification of terms to define unconstrained

Vortex lift augmentation by suction on a 60 deg

Operability of military aircraft - Avionic design

Performance characteristics of a buoyant

Optimal open-loop aircraft control for go-around

Importance of a tactical cargo aircraft in

Functional half-span model support system

Optimization of blade pitch angle for higher

Measuring the combination of subsonic and transonic potential flow

Calculation of wing-body-nacelle interference in subsonic and transonic potential flow

Helicopter reliability and maintainability trends during development and production

System for providing a integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation

Remarks on the calculation of transonic potential flow by a finite volume method

Viscous transonic airfoil flow simulation

Transport engine control design

Rationalization of the maintenance process for helicopter Ka-26

Turbulence measurements in a confined jet using a six-orientation hot-wire probe technique

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

Determination of material properties by limited active-control transport aircraft, volume 2

Determination of material properties by limited active-control transport aircraft, volume 1

System data communication structures for active-control transport aircraft, volume 1

System data communication structures for active-control transport aircraft, volume 2

Determination of material properties by limited scan X-ray tomography

Use of a helmet-mounted matrix display for presenting energy-maneuverability information during simulated close combat

Generic Test Bed (GTB) aircraft

Plain-jet airblast atomization of alternative liquid petroleum fuels under high ambient air pressure conditions
JOHNSON, J. K.

Composite materials
p0325 A82-28590

Two-frequency/Δ/ microwave scatterometer measurements of ocean wave spectra from an aircraft
p0584 A82-24743

JOHNSON, R. W.

Secondary flow mixing losses in a centrifugal impeller
\([\text{AIAA PAPERN 82-0745}]\) p0421 A82-35302

The influence of flow rate on the wake in a centrifugal impeller
\([\text{AIAA PAPER 82-0746}]\) p0421 A82-35303

JOHNSON, P. M.

Multiple aircraft tracking system for coordinated research missions
p0433 A82-35869

JOHNSON, R. M.

737 graphite-epoxy horizontal stabilizer certification
\([\text{NASA-TP-2011}]\) p0446 H82-26217

Airborne measurements of European sky and terrestrial radiances
p0562 H82-30782

JOHNSON, T. E., M. Jr.

Alleviation of the subsonic pitch-up of delta wings
\([\text{AIAA PAPER 82-0139}]\) p0183 A82-22052

Experimental study of delta wing leading-edge devices for drag reduction at high lift
p0198 H82-17125

JOHNSON, T. L.

Self-tuning regulator design for adaptive control of aircraft wing/store flutter
p0578 A82-45538

JOHNSON, R. R.

Development of a comprehensive analysis for rotorcraft. II - aircraft model, solution procedure and applications
p0065 A82-14437

Influence of unsteady aerodynamics on hingeless rotor ground resonance
p0482 A82-38945

Self-tuning regulators for multicyclig control of helicopter vibration
p0305 H82-20198

JOHNSON, N. S.

Multi-parameter yield zone model for predicting spall-crack growth
p0168 A82-20510

JOHNSON, R. L.

Thrust reverser for a long duct fan engine
\([\text{NASA-CASE-3019-1}]\) p0453 A82-26293

JOHNSON, J. W.

BAF - A fault tolerant distributed microcomputer structure for aircraft navigation and control
p0293 H82-27714

JOHNSON, J. P.

Accelerated development and flight evaluation of active controls concepts for supersonic transport aircraft. Volume I: Load alleviation/extended span development and flight tests
\([\text{NASA-CR-155691}]\) p0145 H82-15076

JOHNSON, R. F.

Active Clearance control system for a turbomachine
\([\text{NASA-CASE-12538-1}]\) p0591 A82-32366

JOLLY, J. H., Jr.

Growth of four flaw types in graphite/epoxy composites due to fully reversed fatigue
p0290 A82-27167

JOHNSON, R. H.

IN RESEARCH AERONAUTICS DEDICATION: Spring/Summer 1981
\([\text{AD-1112421}]\) p0462 A82-27216

JONES, A. L.

Integrated control design techniques
\([\text{AD-1060223}]\) p0257 A82-18224

Aerodynamic analysis of VTOL inlets and definition of a short, blowing-lip inlet
\([\text{NASA-CR-165617}]\) p0349 A82-22211

JONES, C.

Advanced stratified charge rotary aircraft engine design study
\([\text{NASA-CASE-165396}]\) p0470 A82-27743

JONES, D. L. G.

A parametric study of dynamic response of a discrete model of turbomachinery bladed disk
\([\text{AIAA PAPER 81-DERT-137}]\) p0162 A82-19399

intake pressure
p0032 H82-11006

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion
p0032 H82-11007

JIN-LIANG, J.

The arbitrary quasi-orthogonal surface method for computing three-dimensional flow in turbine machinery. 2. Calculation of the pressure and temperature flow with the 5 sub-1-surface twisted
p0033 H82-11015

JIN-SHENG, Y.

A theoretical analysis of the stream surface of revolution with supersonic inlet flow in a transonic axial compressor
p0033 H82-11025

JINGQING, J.

Matrix analysis of wings
p0032 H82-10998

JIN, R.

Techniques for modifying airfoils and fairings on airplanes using foam and fiberglass
\([\text{AIAA PAPER 81-2445}]\) p0064 A82-14383

JOENG, J.

The effect of intake flow disturbances on APU compressor blade high cycle fatigue in the Airbus A300
p0513 A82-40965

JOHANSSON, E. H.

Digital spectral analysis of the noise from short duration impulsively started jets
p0434 A82-36191

JOHANSSON, D. C.

Evaluation of a selected group of anti-exposure garment configurations for their effects on the operational performance and survival of naval aircrews
p0079 A82-14972

JOHANSSON, R. S.

Advanced fuel flowmeter for future naval aircraft
p0037 H82-11063

JOHNSON, B. L.

Small B/S/SHM airborne SATCOM terminal
p0290 A82-27209

JOHNSON, R. G.

B/L/LCC effects of commercial off-the-shelf equipment
p0545 A82-42181

JOHNSON, G. B.

Recent sidewall boundary-layer investigations with suction in the Langley 0.3-m Transonic Cryogenic Tunnel
\([\text{AIAA PAPER 82-0234}]\) p0117 A82-17858

JOHNSON, C. L.

Development of the Lockheed SR-71 Blackbird
p0112 A82-17417

JOHNSON, C. H.

Applications of a multiplexed GPS user set
p0380 A82-33050

JOHNSON, D. W.

Reduction in parachute drag due to forebody wake effects
\([\text{AIAA PAPER 81-1939}]\) p0007 A82-10417

Reduction in parachute drag due to forebody wake effects
\([\text{AIAA PAPER 81-2243}]\) p0017 A82-17858

JOHNSON, L. R.

Test demonstration of digital control of wing/store flutter
p0337 A82-30141

JOHNSON, W. E.

Damage tolerant design for cold-section turbine engine discs
\([\text{AD-1018756}]\) p0204 A82-17176

JOHNSON, J. C.

Vibration levels in Army helicopters: Measurement recommendations and data
\([\text{AD-1098121}]\) p0255 A82-18209

JOHNSON, J. L., Jr.

Effects of wing-leading-edge modifications on a full-scale, low-wing general aviation airplane: Wind-tunnel investigation of high-angle-of-attack aerodynamic characteristics
\([\text{NASA-CR-170773}]\) p0466 A82-26217

JOHNSON, J. T.

Composite bonds improve thermal integrity
p0315 A82-30004
JOBS, B. 8.

Fracture and fatigue characterization of aircraft structural materials under blast loading [AD-A109054] p0269 882-19587

JOBS, J. L.

Analysis of computing system configurations for highly integrated guidance and control systems p0363 882-23189

JOBS, J. L.

JOSBI. P. B.

JOBS, S.

JOBS, S. B.

JOBS, X.

Development and demonstration of manufacturing processes for fabricating graphite/LARC 160 polylide structural elements NASA CR-165809 p0357 882-22315

JOBS, M.

The general purpose research rotor - Design features and considerations p0278 882-26379

[ A NS PAPER 81-1-9 ] p0441 882-37777

[ A NS PAPER 81-7 ] p0441 882-37782

[ A NS PAPER 81-9 ] p0441 882-37777

JOBS, J. L. 8.

Distributed data processing modeling for future ATC systems p0220 882-23319

JOBS, E. H.

The outlook for advanced transport aircraft p0181 882-21370

JOBS, J. L.

The F22 RAE Bedford civil flight research program p0170 882-20519

JOBS, J. E.

Reliability, Availability, Maintainability Data Tracking Plan improved GUARDIAN 5 [ AD-A117933 ] p0608 882-33378

JOBS, J. R.

Flow visualization in the Langley 0.3-meter Transonic Cryogenic Tunnel and preliminary plans for the National Transonic Facility p0597 882-32677

JOBS, T. G.

Analytical study of cockpit information requirements [ AD-A108524 ] p0256 882-10218

JOBS, T. P.


JOBS, K. B.

Fatigue behavior of adhesively bonded joints p0328 882-29032

JOBS, S. L.

Two-frequency x Delta k / microwave scatterometer measurements of ocean wave spectra from an aircraft p0584 882-47493

JOOS, E. D.

Extension of proportional navigation by the use of optimal filtering and control methods [ NSA-TR-663 ] p0253 882-18199

JORDENBERG, D. S.


JORDENBERG, P. L.

Future terminal area systems p0493 882-38462

JOHNS, A.

Practical application of a computerized flight by flight fatigue test system p0440 882-37768

JOSEPHSON, R. J.

Combined multisensor displays p0210 882-22205

JOSHI, D. S.


JOSHI, P. R.

Design, fabrication and testing of an electrical analogue for heat transfer to coated turbine blade p0382 882-33520

JOSLE, R. D.

Research on turbine rotor-stator aerodynamic interaction and rotor negative incidence stall [ AD-A110341 ] p0310 882-21203

JOU, S. C.

Singularity embedding method in potential flow calculations [ NASA CR-166387 ] p0566 882-31300

JOW, R. H.

Finite volume calculation of three-dimensional potential flow around a propeller [ A I A A P A P E R 82-0957 ] p0374 882-21933

JOYANOVIC, Z.

A method to determine runway capacity p0553 882-44100

JUAN-LAURE, B.

Initial experimental research into the response of turbojet engine compressors to distortion of intake pressure p0302 882-11006

A preliminary experimental investigation of the response of a turbojet engine to intake pressure distortion p0302 882-11007

JURCH, P. J.

Air Force Academy aeronautics digest Fall/Spring 1980 [ AD-A103388 ] p0301 882-20139


JURCH, R. M.

Computer prediction of three-dimensional potential flow fields in which aircraft propellers operate [ NASA CR-165317 ] p0565 882-32312

JURCH, R. E.

Aircraft design/fuselage critical component development program p0287 882-27130

JURCH, R.

New processes and methods of technical diagnostics and prognostics in the case of the engine HK-6-8. LII p0335 882-29925

JURCH, H.

Helicopter rotor dynamics: Results of experimental research at the PTVR-rotor test stand and their comparison with theoretical results p0249 882-18158

K

KADOYA, T.

On the numerical analysis of stall flutter in turbine cascades p0143 882-15054

KABAB, R.

Modemizing the Egyptian A.T.C. system p0125 882-18273

KABAB, R.

The reliability and safety of small passenger aircraft p0241 882-24972

A method for observing the deterioration of airborne life in operational conditions p0436 882-37123

KALATIAIS, M.

Elevator unit for the Alpha-Jet, made from carbon-fibre reinforced plastic [ NASA CR-165317 ] p0325 882-28649

A one-shot autoclave manufacturing process for carbon epoxy components p0509 882-4935

KALT, S.

Three-dimensional analysis of cascade flutter in parallel shear flow p0144 882-15062

KALABARIS, G. G.

Evaluation of the effects of model scale and test technique on jet-induced effects p0361 882-23167

Study of WIGL in ground-effect flow field including turbulence effect [ NASA CR-166258 ] p0600 882-25170

KALEKA, J.

Evaluation of the helicopter low airspeed system 1980 p0251 882-18172

B-73
KALIVICH, V. B.

Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft

KALIBOVICH, V. B.

KAB, J.

The use of dynamometer readings for damping of the actual vibrations of twin-rotor gyrocompasses

KALIVICH, V. A.

KABBAB. J. B.

Kibbi, J.

KABIBOV, P. S.

KAHBE, I.

KALIHIS, E. K.

KAHPB, B. F.

KAtlBTi, I. p.

KAUBII, B. K.

KABDH,. O. A.

AIDADAI, B.

KAHOA. B.

KABAFABI, A.

EAPLAN, I.

KABZOLA. B. A.

KABOD. I.

KAMA. p.

KAIIA. I.

KABDH,. O. A.

KABBABKAB, J. S.

KABBABKAB. J.

KABBAB. B. A.

EASAHA, X.

KAPLDB, L. II.

KAPBALOV. ?. B.

KAPBALOV. D. B.

KABBABCBB. J.

KABBABKAB. J.

KABBABKAB. J.

EASAI, B.

EAiP, O.

Bovinrj target detector (Bod 2)

KABBABKAB. J.

KABBABKAB. J.

KABLIB. Bi. E.

KABLIB. J. B.

KABBAB. B. B.

KABPIB. B. B.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.

KABBAB. B. A.
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>KASCAI, A. P.</td>
<td>Gas turbine ceramic-coated-vane concept with convection-cooled porous metal core</td>
<td>p0134 882-10090</td>
</tr>
<tr>
<td>KASCHLE, N.</td>
<td>Triggered lightning</td>
<td>p0432 882-35727</td>
</tr>
<tr>
<td>KASTE, R. F.</td>
<td>Kinematic investigation Hughes Helicopter 7.62m character line</td>
<td>(AD-811114a) p0524 882-20207</td>
</tr>
<tr>
<td>KETCHER, R.</td>
<td>Failure analysis of silica phenolic nozzle liners</td>
<td>p0391 882-36882</td>
</tr>
<tr>
<td>KAYE, J. E.</td>
<td>Dynamic load measurements with delta wings undergoing self-induced roll-oscillations</td>
<td>(AIAA PAPER 82-1532) p0407 882-39098</td>
</tr>
<tr>
<td>KAYFAR, A.</td>
<td>Turbine blade non-linear structural and life analyses</td>
<td>(AIAA PAPER 82-1056) p0415 882-36981</td>
</tr>
<tr>
<td>KAVANAGH, P.</td>
<td>Aerodynamics of advanced axial-flow turbocharger</td>
<td>(AIAA-8111011) p0458 882-26446</td>
</tr>
<tr>
<td>KAY, R. E.</td>
<td>Design and fabrication of a composite rear fuselage for the 68-60/Black Hawk/</td>
<td>p0500 882-40526</td>
</tr>
<tr>
<td>KAYE, R. E.</td>
<td>Aerelastic characteristics of a cascade of sweptback blades in subsonic and supersonic flow</td>
<td>(AIAA PAPER 81-087-122) p0161 882-19337</td>
</tr>
<tr>
<td>KEELER, T.</td>
<td>Impact of an omnidirectional traffic alert and collision avoidance system on the air traffic control radar beacon system and the discrete address beacon system</td>
<td>(AD-8116170) p0567 882-32336</td>
</tr>
<tr>
<td>KEHLEY, R. N.</td>
<td>Fighting forest fires with the aid of aircraft in the United States of America</td>
<td>p0330 882-29577</td>
</tr>
<tr>
<td>KEELEY, R. S.</td>
<td>Investigation of the transonic calibration characteristics of turbine static pressure probes</td>
<td>(AIAA PAPER 82-07-280) p0430 882-35454</td>
</tr>
</tbody>
</table>

**KEERIS, D. L.**

<table>
<thead>
<tr>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable power</td>
<td>p0226 882-24007</td>
</tr>
<tr>
<td>Reliable power</td>
<td>p0355 882-22275</td>
</tr>
<tr>
<td>A computer-controlled oscillation mechanism for unsteady aerodynamic experiments</td>
<td>p0328 882-29016</td>
</tr>
<tr>
<td>Scenarios of economic development within the European Community up to the year 2000</td>
<td>p0603 882-33286</td>
</tr>
<tr>
<td>Mechanical properties of hot isostatic pressed Ti-6Al-4V-Titanium for helicopter components</td>
<td>(AIAA-82-3298-1) p0410 882-25383</td>
</tr>
<tr>
<td>Impact of advanced propeller technology on aircraft/mission characteristics of several general aviation aircraft</td>
<td>p0604 882-33347</td>
</tr>
<tr>
<td>Mathematical modeling of ice accretion on airfoils</td>
<td>p0286 882-27098</td>
</tr>
<tr>
<td>A redundancy concept for a digital CSAS</td>
<td>p0251 882-10170</td>
</tr>
<tr>
<td>Selection of a starting system for a low cost single engine fighter aircraft</td>
<td>(AIAA PAPER 82-1043) p0415 882-34977</td>
</tr>
<tr>
<td>Advanced medium scale real-time system</td>
<td>p0290 882-27167</td>
</tr>
<tr>
<td>Limited evaluation of an F-14A airplane utilizing an airframe-radar interconnect control system in the landing configuration</td>
<td>(NASA-TN-811972) p0100 882-13148</td>
</tr>
<tr>
<td>Fluctuating forces and rotor noise due to distorted inflow</td>
<td>p0510 882-40495</td>
</tr>
<tr>
<td>Computer-program model for predicting horizontally and vertically polarized VLF atmospheric radio noise at elevated receivers</td>
<td>(AD-8103480) p0307 882-20308</td>
</tr>
<tr>
<td>Joint Tactical Microwave Landing System (JTMLS) airborne signal processing</td>
<td>(AIAA 82-2247) p0048 882-13471</td>
</tr>
<tr>
<td>MLS flare low elevation angle guidance considerations</td>
<td>p0175 882-20566</td>
</tr>
<tr>
<td>Flight experience with a backup flight-control system for the UH-60 research vehicle</td>
<td>(AIAA PAPER 82-1541) p0947 882-40429</td>
</tr>
<tr>
<td>Air Force Academy aeronautics digest Fall/Summer 1980</td>
<td>p0301 882-20139</td>
</tr>
<tr>
<td>Air Force Academy aeronautics digest: Spring/Summer 1981</td>
<td>p0462 882-27216</td>
</tr>
<tr>
<td>Advanced generating system technology</td>
<td>p0230 882-24380</td>
</tr>
<tr>
<td>Service life investigation of a small scale wing of CFRP construction</td>
<td>p0357 882-22326</td>
</tr>
<tr>
<td>Report from the Working Party on New Fiber Materials</td>
<td>p0390 882-24512</td>
</tr>
<tr>
<td>A procedure for evaluating fuel composition</td>
<td>p0390 882-24512</td>
</tr>
<tr>
<td>The analysis of the thermal-mechanical stress conditions in axi-symmetric rotating hot components of aircraft/gas turbine</td>
<td>p0543 882-41686</td>
</tr>
</tbody>
</table>

**KEECHER, D. M.**

<table>
<thead>
<tr>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A two-dimensional boundary-layer program for turbine airfoil heat transfer calculation</td>
<td>(AIAA PAPER 82-07-93) p0246 882-35336</td>
</tr>
</tbody>
</table>
photointerpretation key for pine regeneration

analysis using high-altitude color infrared panoramic photography [PB86-164450] p0562 882-30606

KLEEF, B. W.

In-situ calibration of flight heat transfer instrumentation [AIAA PAPER 81-ENAS-13] p0011 882-10901

KLEIN, L. M.

A cost effective method for the control of roll due to side slip on a low speed aircraft [AIAA PAPER 81-2422] p0054 882-13861

Planning a helicopter flight test program [AIAA PAPER 81-2381] p0056 882-13801

KIDDAGASSER, B.

Static investigations of rotor blades under wind and during stationary operation [ISO-269] p0218 882-17639

Stability and response to gravity of the flap lag motion for a rigid rotor blade with flap-pitch coupling [ISO-270] 882-17640


Static and dynamic investigations for the model of a wind rotor [ISO-272] p0218 882-17642

KIDDALOV, B. F.

Optimization of requirements on the pitting-prevention properties of turbojet-engine oils p0082 882-15723

KELLER, R. N.

Proposed multipurpose flying radio-physical laboratory using an IL-18 aircraft p0550 882-43276

KERN, R. G.

Four pod tilting pad bearing design and application for multistage axial compressors [AIAA PAPER 81-LBD-12] p0126 882-10429

KERNER, Y. J.

Measurements of heat transfer coefficients on gas turbine components. II - Applications of the technique described in part I and comparisons with results from a conventional measurement technique and predictions [AIAA PAPER 82-GT-175] p0426 882-35388

KISSEL, R. L.

Improving the crashworthiness of general aviation aircraft by crash injury investigations p0298 882-28476


Crashworthiness studies: Cabs, seat, restraint, and injury findings in selected general aviation accidents [AD-116878] p0531 882-29275

KISH, J.

Selecting the best reduction gear concept for prop-fan propulsion systems [AIAA PAPER 82-1126] p0147 882-35020

KISSEL, G. L.

Experience with high performance V/STOL fighter projects at NASA [AIAA PAPER 81-2614] p0107 882-16901


KLEIN, L.

Structural modification to achieve antiresonance in helicopters p0379 882-32049

KLEFFT, J. L.

PLS engineering development testing - Early results p0124 882-18157

KLAAS, W.

Perspectives for the use of remotely piloted vehicles in military technology p0554 882-44220

KLAEDT, G.

Short-term behavior of a Doppler navigation system and comparison with position indication by means of scanning radar p0390 882-34672

B-77
Improved 243 MHz homing antenna system for use on helicopters

KLEBER, L. A.

KLING, W. E.

KLINGS, S. C.

KLINS, A.

KLINS, B.

KLINS, C.

KLINS, D.

KLINS, E.

KLINS, F.

KLINS, J.

KLINS, K.

KLINS, L.

KLINS, M.

KLINS, P.

KLINS, R.

KLINS, T.

KLINS, V.

KLINS, W.

KLINS, X.

KLINS, Y.

KLINS, Z.

KLINS, A. R.

KLINS, A. W.

KLINS, C. C.

KLINS, E. J.

KLINS, F. A.

KLINS, G. L.

KLINS, H. L.

KLINS, K. H.

KLINS, L. A.

KLINS, M. L.

KLINS, P. L.

KLINS, R. L.

KLINS, T. A.

KLINS, V. F.

KLINS, W. E.

KLINS, X. E.

KLINS, Y. L.

KLINS, Z. L.

KLINS, A. R.

KLINS, A. W.

KLINS, C. C.

KLINS, E. J.

KLINS, F. A.

KLINS, G. L.

KLINS, H. L.

KLINS, K. H.

KLINS, L. A.

KLINS, M. L.

KLINS, P. L.

KLINS, R. L.

KLINS, T. A.

KLINS, V. F.

KLINS, W. E.

KLINS, X. E.

KLINS, Y. L.

KLINS, Z. L.

KLINS, A. R.

KLINS, A. W.

KLINS, C. C.

KLINS, E. J.

KLINS, F. A.

KLINS, G. L.

KLINS, H. L.

KLINS, K. H.

KLINS, L. A.

KLINS, M. L.

KLINS, P. L.

KLINS, R. L.

KLINS, T. A.

KLINS, V. F.

KLINS, W. E.

KLINS, X. E.

KLINS, Y. L.

KLINS, Z. L.

KLINS, A. R.

KLINS, A. W.

KLINS, C. C.

KLINS, E. J.

KLINS, F. A.

KLINS, G. L.

KLINS, H. L.

KLINS, K. H.

KLINS, L. A.

KLINS, M. L.

KLINS, P. L.

KLINS, R. L.

KLINS, T. A.

KLINS, V. F.

KLINS, W. E.

KLINS, X. E.

KLINS, Y. L.

KLINS, Z. L.

KLINS, A. R.

KLINS, A. W.

KLINS, C. C.

KLINS, E. J.

KLINS, F. A.

KLINS, G. L.

KLINS, H. L.

KLINS, K. H.

KLINS, L. A.
B-81

KEIOH, J. G.
Study and design of high G augmentation devices for flight simulators
[AD-8109127] p0306 882-20195

KEIO, J. L.
Optimization of canard configurations - An integrated approach and practical drag estimation method
p0517 882-10423

KEIPAL, C.
Minimum induced drag of canard configurations
p0518 882-81116

KIES, V.
Practical design and realization of a digital adaptive flight control system
p0039 882-11079

KIESCARP, J. G.
Low cost programmable multiasulator facility
[AI/A PAPER 81-2229] p0053 882-13534

KIESEBACH, C.
Justification for, and design of, an economical programmable multiple flight simulator
p0530 882-36969

KIESER, B.
Determination of the flammability characteristics of aerospace hydraulic fluids
p0104 882-16187

KIESER, V.
Aerospace concepts for fuel-efficient transport

KIESER, B.
Low cost programmable multiasulator facility

KIESER, B.
Justification for, and design of, an economical programmable multiple flight simulator

KIESER, B.
Determination of the flammability characteristics of aerospace hydraulic fluids

KIESER, V.
Practical design and realization of a digital adaptive flight control system

KIESER, B.
Advanced component development design basis for next generation medium power helicopter engines
p0207 882-17209

KIESER, B.
Component design and development for future helicopter engines
p0246 882-18134

KIESER, B.
Aircraft surface coatings for drag reduction/erosion protection

KIESER, B.
Air-breathing engine test facilities register

KIESER, B.
Aerodynamic concepts for fuel-efficient transport aircraft
p0511 882-40957

KIESIKI, R. E.
STOL capability impact on advanced tactical aircraft design
[AI/A PAPER 81-2617] p0155 882-19206

KIESER, B.
Mathematical model for the maintenance program of modern jet aircraft
[DYNAL-TJ-81-9] p0025 882-10002

KIESER, B.
Mathematical model for a maintenance program for modern jet aircraft
[SAA PAPER 77-724] p0585 882-32308

KIESER, B.
Jet fuel from carbon
p0010 882-12021

KIESER, B.
Improvement of fuel economy by flying with maximum rearward center-of-gravity positioning
p0221 882-23470

KIESER, B.
Technical/operational ATC scenarios for future TMA navigation
p0071 882-14774

KIESER, B.
Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling
[AD-1110015] p0539 882-29800

KIESER, B.
An aerodynamic and signature shaping technique for developing advanced supersonic missile concepts
[AI/A PAPER 82-0373] p0120 882-17912

KIESER, B.
Supersonic missile aerodynamic and performance relationships for low observables mission profiles
[AI/A PAPER 82-1290] p0487 882-39085

KIESER, B.
Control of vibration in aerospace continuum experiments
p0103 882-15056

KIBOSIC, J. M.
Theoretical and experimental investigation of joint-structural damping interaction for airplane construction
p0385 882-33995

KIE, B.
Oscillations and vibrations of aircraft on runways
p0241 882-24974

KIESEL, S. M.
Application of integration algorithms in a parallel processing environment for the simulation of jet engines
[NASA-TM-82-B746] p0138 882-18489

KIESEL, S. M.
Automated procedures for developing hybrid computer simulations of turbofan engines. Part 1: General description
p0606 882-33020

KIEFEL, J. C.
Factors influencing velocity distributions at inlet/compressor interfaces
p0321 882-21405

KIEFER, B. D.
Comparison of aircraft and ground vehicle noise levels in front and backyards of residences
p0166 882-20058

KIEFFER, B. D.
Experimental study of subsonic and transonic flows past a wing
p0005 882-10363

KIEFSEPOVNA, A. W.
On evaluating the influence of local disruptions of flow over trailing edge and leading edge flaps from the data of wind tunnel tests of a rectangular wing segment
p0015 882-11465

KIEFO, C.
Crowdflow shock on the suction side of a flat delta wing with supersonic leading edges
p0332 882-29659

KIEFOT, B.
Wind tunnel investigations for the flat spin of slender bodies at high angles of attack
[AI/A PAPER 82-0050] p0115 882-17755

KIEFOT, B.
Improved techniques for the calibration and measurement of inflight loads
[AI/A PAPER 81-2502] p0558 882-13924

KIEFOT, B.
Characteristics of a microwave landing System
p0545 882-42216

KIEFOT, B.
Heter model for the verification of computational methods
[ISP-275] p0214 882-17638

KIEFOT, B.
Individual bypass throttling in fighter engines
[AI/A PAPER 82-1205] p0419 882-35100

KIEFOT, B.
Air Traffic Flow Management and Air Traffic Flow Control
p0334 882-29923

KIEFOT, B.
The network of civilian air rescue in Germany
p0152 882-19004

KIEFOT, B.
Identification of terms to define unconstrained air transportation demands
[NASA-CH-165961] p0568 882-31311

KIEFOT, B.
Transport engine control design
[AI/A PAPER 82-1076] p0416 882-34996

KIEFOT, B.
Transportation system evaluation methodology development and applications. Phase 3
[NASA-CH-165999] p0085 882-12051

KIEFOT, B.
The promise of laminated metals in aircraft design
p0506 882-40903

KIEFOT, B.
Natural flow and defect formation in forcing an airfoil shape from metal-matrix composites
p0385 882-33995
PERSONAL AUTHOR INDEX

LAISB, A. L.
An Operational evaluation of head up displays for civil transport operations. NASA/FAA phase 3 report [NASA-TP-1615] p0068 882-33381

LABBBICB, 0. L.
Determination and analysis of jet and missile fuel deposits [AD-1105468] p0090 882-12248

LABBB, E.
The aviation route forecast (ABF) program - An interactive system for pilot self-briefing p0553 882-43821

LABBB, B. P.
The Aviation Route Forecast (ABF) program - An interactive system for Pilot Self-Briefing p0560 882-45830

LAUBER, S. D.
The influence of closed-coupled, rear fuselage mounted nacelles on the design of an advanced high speed wing p0096 882-13092

LAUGHERY, J. L.
Application of advanced exhaust nozzle for tactical aircraft p0050 882-40889

LAURERS, R.
Optimized 15 ton class commercial aircraft engine p0094 882-13075

LAVAY, P.
Computational of three dimensional unsteady nonuniform flow in the blade-free annular channel of a turbochrome [OSRDA-97-1982-2] p0592 882-32372

LAVER, E. L.
Sub energetics of compressor blade tip seals p0265 882-27078

LAVRY, G. L.
The simulator and the airline pilot p0170 882-20527

LAVYD, H.
Radiation/catalytic augmented combustion [AD-1112376] p0475 882-27434

LAYCH, B.
The design of airfoil profiles with trailing edge loading in transonic flow p0554 882-46224

LAYN, E. P.
Light-guided information distribution systems [AIAD-81-2320] p0051 882-13519

LAOEPBE, G.
Fast and accurate gyrocompass using strapdown turned rotor gyros as a solution to combat helicopters navigation problems p0016 882-11927

LABOV, E. V.
Numerical study of vibrational relaxation in the turbulent mixing of jets in a supersonic nozzle p0334 882-29880

LAB, C. L.
A computer program for variable-geometry single-stage axial compressor test data analysis [DD-00400] p0191 882-16086

LABE, E. L.
Recent sideline boundary-layer investigations with suction in the Langley O. 3 m Transonic Cryogenic Tunnel [AIAD-PAPER 82-0234] p0117 882-17858

LAWRENCE, D.
The use of groundspeed, in a wind shear and the flight evaluation of a radar-altimeter-based system for the measurement of groundspeed [AD-1104758] p0087 882-12060

LAWRENCE, D. L.
Flight test method for the determination of reciprocating engine cooling requirements [AIAD-PAPER 81-2446] p0055 882-13878

LAWRENCE, L. E., Jr.
Deficiencies and constraints that affect the design of cockpit enclosures and transparencies p0226 882-24303

LAWSON, P. W.
Aircraft transparency design keys p0226 882-24307

LAWSON, P. W.
Twin tab excitation system for the BAC 106 p0062 882-16363

LAWSON, R. E.
Design concepts of an advanced propulsion monitoring system [AIAD-PAPER 82-1130] p0438 882-37899

LAUTER, R. R.
Proposed research tasks for the reduction of human error in naval aviation mishaps [AD-1112335] p0464 882-27241

LE BALLARD, J. C.
Strong matching method for computing transonic viscous flows including wakes and separations - Lifting airfoils p0010 882-10821

LECH, E. J.
Technical evaluation report of the AGARD Fluid Dynamics Panel Symposium on computations of viscous-inviscid interactions [OERDA-TP-116-116] p0163 882-19733

LECH, W. J.

LECH, L.
Aircraft cabin air ozone contamination and compliance with regulations p0342 882-31057

LECH, H.
Numerical prediction of transport aircraft p0750 882-20714

LEAFETT, L. E.
Aerodynamic and mechanical design report p0025 882-10023

LEVI, B. L.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEVIN, H. B.
The survivors of the 1972 Israeli Air Force aircraft crash p0009 882-11071

LEVIN, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEWIS, L. C.
The mission system avionics [AIAD-PAPER 82-1121] p0146 882-35018

LEWERS, J. B., Jr.
The outlook for advanced transport aircraft p0181 882-21374

LEFETT, L. E.
Static internal performance characteristics of two thrust reverser concepts for axisymmetric nozzles [NASA-TP-2025] p0446 882-20235

LEFEBVRE, F. A.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFEBVRE, S.
A ground-mission analysis of the mission system avionics [AIAD-PAPER 82-1121] p0146 882-35018

LEFETT, L. E.
Aircraft cabin air ozone contamination and compliance with regulations p0342 882-31057

LEFEBVRE, F. A.
Aerodynamic and mechanical design report p0025 882-10023

LEFETT, L. E.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEFETT, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEFEBVRE, F. A.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFEBVRE, S.
Aerodynamic and mechanical design report p0025 882-10023

LEFETT, L. E.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEFETT, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEFETT, L. E.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFETT, L. E.
Aerodynamic and mechanical design report p0025 882-10023

LEFETT, L. E.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEFETT, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEFETT, L. E.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFETT, L. E.
Aerodynamic and mechanical design report p0025 882-10023

LEFETT, L. E.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEFETT, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEFETT, L. E.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFETT, L. E.
Aerodynamic and mechanical design report p0025 882-10023

LEFETT, L. E.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEFETT, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEFETT, L. E.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFETT, L. E.
Aerodynamic and mechanical design report p0025 882-10023

LEFETT, L. E.
A ground-based study of the interaction of the atmosphere with the marine layer and the Westerly jet stream at mid-latitudes p0025 882-10024

LEFETT, L. E.
Energy efficient engines: Turbine transition duct model technology report p0010 882-33394

LEFETT, L. E.
A proposed flight safety program for the Korean civilian aircraft program p0127 882-23662

LEFETT, L. E.
Aerodynamic and mechanical design report p0025 882-10023
ecossoy

LEE, E. C. S. p0169 882-20516

LEE, E. G. S. p0087 882-12065

Experimental and analytical studies of advanced air cushion landing systems [NASA-CS-3476]

LEE, F. p0175 882-20656

Land navigation with a low cost GPS receiver

LEE, F. C. p0176 882-20743

Power system design optimization using Lagrange multiplier techniques


LEE, G. p0136 882-14447

Holographic interferometry and tomography at Ames Research Center

LEE, J. p0597 882-32681

Experiment on active flutter suppression of a helicopter wing [84-T-699]

LEE, J. Q. p0356 882-22282

Real-time simulation of helicopter IFR approaches into major terminal areas using EHV, HLS, and CDTI [AIAA PAPER 82-0260]

NASA/FAA helicopter ATC simulation investigation of EHV/HLS instrument approaches [AIAA PAPER 82-17868]

LEE, J. p0501 882-40535

New separators for battery systems

LEE, J. T. p0015 882-11715

Applications of conventional and doppler radars for aviation safety

Turbofan and wind shear experiments related to aircraft operation in the terminal area

Doppler radar-research and application to aviation [AD-109845]

Field program operations: Turbulence and gust front [AD-6115487]

LEE, J. J. p0562 882-30804

Fuel-rich plane combustion [AD-1098136]

LEE, O. H. K. p0258 882-18349

Preliminary investigation of effects of heavy rain on the performance of aircraft [NASA-TN-823272]

LEE, R. L. p0301 882-20145

Fuselage and characterization of polyimide resinous foams for various densities for aircraft seating applications [NASA-CS-167421]

LEE, R. L. p0090 882-12230

Field studies of the Air Force procedures (NOISECHECK) for measuring community noise exposure from aircraft operations [AD-1116274]

Far-field acoustic data for the Texas A1E, Inc. bush house [AD-1116564]

LEE, R. L., XII p0540 882-30032

In situ ozone data for comparison with James absorption remote sensor: 1980 PEER/HERO program [NASA-TN-84471]

LEE, S. G. p0413 882-25661

Prediction weldbonding on the A-10 aircraft

LEE, T. p0327 882-20995

Test and evaluation of the airdata radar wind shear detection system [AD-1112663]

LEE, T. p0478 882-27924

Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks [AD-103270]

LEE, T. D. p0027 882-10033

Use of aircraft-derived data to aid in ATC tracking systems. 1 - Accuracy and theoretical considerations [AIAA PAPER 82-42504]

LEFEBER, L. M. p0146 882-34993

Influence of airblast atomizer design features on mean drop size

LEFEBRE, L. E. p0582 882-46387

Improving conflict alert performance using moving target detector data

LEFFERTS, R. E. p0607 882-33370

Memory and computational requirements for tracking in the advanced computer system [AD-117666]

LEFFLER, R. P. p0612 882-33619

Aircraft alerting systems standardization study [AIAA 81-2242]

The fourth dimension

Aircraft alerting systems standardization study. Volume 2: Aircraft alerting system design guidelines

Aircraft alerting systems standardization study. Volume 1: Candidate system validation and time-critical display evaluation

LEFRANCQ, J. P. p0463 882-27236

A complete method for computation of blade mode characteristics and responses in forward flight

A complete method for computation of blade mode characteristics and responses in forward flight [S1S1-82-210-101]

LEFRAK, R. M. p0353 882-22254

The evolution of display formats for advanced fighters using multiscope color CRT displays

LEGALL, G. p0505 882-40808

A numerical method for studying nozzle-jet-airflow interaction in inviscid three-dimensional flow

LEGENDRE, R. p0096 882-13094

Skin friction lines

Generation of noise by turbulence [ONERA-P-1981-3]

LEGEND, R. M. p0400 882-24946

Preliminary investigation into the addition of auxiliary longitudinal thrust on helicopter agility

LEHMAN, L. L. p0249 882-18155

Hybrid state vector methods for structural dynamic and aerelastic boundary value problems

LEHMAN, L. O. p0567 882-31304

Aircraft design for fuel efficiency

LEHMAN, G. p0512 882-40973

Optimization of blade pitch angle for higher harmonic rotor control

LEPTINSKY, R. p0441 882-37776

The role of modern control theory in the design of controls for aircraft turbine engines

LEPTINSKY, R. H. p0282 882-26526

The role of modern control theory in the design of controls for aircraft turbine engines [NASA-TM-82815]

LESTER, J. C. p0354 882-22262

TRACLS evaluation report. Special report: A procedure for BT position improvement using linear regression analysis of glide slope structure

[AD-1115926]

LESTER, R. M. p0206 882-33365

Similarity parameters for the geometric structure of a supersonic jet propagating in a channel and in a submerged space

LEHAR, P. p0387 882-39132

The use of flight simulators in l'Armee de l'air [AIAA PAPER 82-02520]

LEHAR, L. p0211 882-10035

A CFP taileron for the Tornado: Construction and production

[BH-30212/KFES/FOL/2]
PERSOANL AUTHOR INDEX

LH-, A. M. The general purpose research rotor - Design features and considerations p0278 802-26379

LHNOR, L. A. Enhancements and algorithms for avionic information processing system design methodology (AD-1117998) p0609 802-33385

LECCO, C. N. Statistical analysis methods for characterizing composite materials p0290 802-27162

LEMON, E. A. Design for the operating environment - Sing-fin tail rotor program p0277 802-26378

SING-FIN augmentation effects p0502 802-40508

LEWAND, D. J. Performance improvement features of General Electric turbofan engines [AIAA PAPER 82-GT-270] p0429 802-35486

LEWIS, C. L. Lightning detection and ranging p0277 802-26367

LEWIS, E. F. Fabric composites in structural design p0297 802-27126

LEWIS, E. G. Potential propulsion considerations and study plan for all-electric aircraft p0261 802-19137

LEWIS, R. C. The payoff from U.S. investment in aeronautical research and development p0072 802-14793

The influence of aeronautical RD expenditures upon the productivity of air transportation (NASP-18-08440) p0147 802-15988

LEWIS, J. T. Generation of electrostatic charge in fuel handling systems: A literature survey (AD-1106056) p0137 802-14456

LEWIS, J. Recent improvements in aircraft Kiel-Cd cells p0225 802-20285

LEWIS, J. P. Conceptual design of an integrated power and avionics information system p0072 802-14800

Preliminary design of an advanced integrated power and avionics information system p0507 802-40907

LEWIS, J. N. Advanced electrical aircraft system control technology demonstrator. Phase 1: Requirements analysis and conceptual design (AD-1103922) p0031 802-10326

Advanced electrical aircraft system control technology demonstrator. Phase 1: Analysis and preliminary design (AD-1113633) p0524 802-28286

LEWIS, J. L. Improving composite bolted joint efficiency by laminate tailoring p0180 802-19982

LEWIS, L. L. Synthesis of system for evaluating gyrostabilizer state with unknown disturbances p0015 802-11469

LEWIS, R. H. Experimental study of a jet deflector p0362 802-23173

LEY, A. An implicit finite-volume method for solving the Euler equations [FORUM, TP No. 1982-59] p0552 802-43753

LECHER, M. Further development of the test concept of the NASA JET engine LANCAC 06 p0257 802-18223

LECHER, M. D. Integrated navigation-TP/TA-system based on stored terrain data processing p0362 802-23183

LFTALACK, D. Detection of obstacles by low flying aircraft [704-C-30227-B1] p0140 802-15026

LUBBLESHED, E. D. Sensor footprints and homing range of terminal guidance munition [ATH-TR-81-5] p0146 802-15111

LYN, J. L. Passive aircraft location p0547 802-42791

LYTASOV, P. D. Formation of triangular-element stiffness matrix using solid interpolation p0014 802-11064

LYTO, G. Satellite localization of aircraft accidents - The SARS program [AIAA PAPER 81-765] p0555 802-14099

LYTH, E. D. Propane installation aerodynamics of a supercritical swept wing transport configuration [AIAA PAPER 81-1563] p0089 802-10566

LYTIS, D. Chordwise and compressibility corrections for arbitrary planform slender wings p0443 802-37931

Dynamic load measurements with delta wings undergoing self-induced roll-oscillations [AIAA PAPER 82-1320] p0687 802-39096

LYTIS, E. M. Preliminary functional description of integrated flow management (AD-109909) p0313 802-21171

LYTIS, E. D. Optical stream surfaces in supersonic three-dimensional flows p0547 802-42722

LYTIS, D. Application of high bypass turbofan computer simulation to flight and test data processing [AIAA PAPER 82-GT-141] p0246 802-35366

LYTIS, E. M. Application of the ABC helicopter to the emergency medical service role p0107 802-19219

LYTIS, E. M. Analytical and simulator study of advanced transport Tactical Air Control System /TACS/ with advanced Tactical Radars p0526 802-20298

LYTIS, E. M. SHAR - An air battle simulation of the USAF Tactical Air Control System /TACS/ with advanced Tactical Radars p0158 802-19256

LYTIS, E. M. The use of differential pressure feedback in an automatic flight control system [AIAA 82-1596] p0485 802-38981

A program to evaluate a control system based on feedback of aerodynamic pressure differentials [NASA CR-163466] p0051 802-16089

LYTIS, E. L. The modular AAS p0294 802-27886

LYTIS, E. Chem-Braze abradable seal practical p0341 802-31048

LEHARODORI, G. L. Predictive model for jet engine test cell opacity [AD-1117558] p0610 802-33397

LEHRER, C. H. Seal gas flows over complex geometries at moderate angle of attack [AIAA PAPER 82-0320] p0165 802-19601

LEHRER, D. Helicopter engine technology - With particular reference to the Rolls-Boyce Gem engine p0089 802-10504

An alternative approach to engineering structures using monitoring systems p0209 802-17223

LEHRER, D. L. T/P polarization ratios in a sample of 30 km sferics received at altitudes from 0 to 70 km [AD-1108182] p0258 802-18464

LEHRER, G. M. Y/S/TOL status from the engine technology viewpoint [AIAA PAPER 81-2648] p0108 802-16913

Collaborative development of aero-engines [P8R-90081] p0355 802-22277

LEHRER, D. Using phased array radar for data communications p0068 802-14725
LOGAN, E. J. L.  
Pre-design study for a modern four-bladed rotor  
for the Rotor System Research Aircraft (RSRA)  
[NASA-CR-166194]  
p0560 A82-40524

LOGAN, E. J. L.  
Wind tunnel measurements of three-dimensional  
waves of buildings  
[NASA-CR-3565]  
p0461 A82-26921

LOGAN, J. M.  
Bonded aluminum honeycomb - aircraft flight  
surface primary structure application  
[AIAA 82-0676]  
p0338 A82-30145

LOGAN, R. H.  
The Maneuvering Flight Path Display - a flight  
trajectory solution display concept  
p0074 A82-14024

LOGOIS, P. J.  
Production Verification Testing (PVT) of guidance  
and control systems for high reliability  
p0363 A82-23107

LOGOIS, R. P.  
HASA Broad Specification Fuels Combustion  
Technology program - Pratt and Whitney Aircraft  
Phase I results and status  
[AIAA PAPER 82-1066]  
p0416 A82-39999

LOGOS, R.  
Aeroclamity of compressor blades - Subsonic  
stall flutter  
p0285 A82-26993

Aeroclamity of compressor blades: Subsonic stall  
flutter  
p0014 A82-26189

LOGE, R. L.  
Results of experimental study of heat transfer to  
turbine blades with porous cooling  
p0014 A82-11646

LOFIHONOV, L. P.  
Measuring thermal loads by means of strain  
transducers  
p0582 A82-46619

LONG, T. R.  
Automated radome performance evaluation in the  
Radio Frequency Simulation System /RFSS/  
facility at NASA  
p0281 A82-26471

LONG, J.  
Viscous transonic airfoil flow simulation  
p0506 A82-40897

LOMIS, J. P.  
The performance of warning systems in avoiding  
controlled-flight-into-Terrain /CFIT/ accidents  
p0582 A82-46255

LOMIS, W. L.  
Problems in the automation of the thermal-stress  
analysis of flight vehicles  
p0293 A82-27509

LOLAM, E. L.  
Fuel quality processing study, volume 1  
[NASA-CR-165327-1]  
p0399 A82-24649

Fuel quality/processing study. Volume 2:  
Appendix. Task 1 literature survey  
[NASA-CR-165327-VOL-2]  
p0399 A82-29650

LORO, D.  
Development of an ejection seat ballast block for  
the F-11 aircraft  
[AD-A109804]  
p0303 A82-20161

Development of a supported airbag ejection  
 restraint (SABER) for windblast protection  
[AD-A109807]  
p0303 A82-20162

LOBELL, R.  
Preplanned product improvement and other  
modification strategies: Lessons from past  
aircraft modification programs  
p0463 A82-27220

LOBELL, R.  
PHIX - the interface for engine data to  
IBDS  
[AIAA PAPER 82-1127]  
p0417 A82-35022

LOBELL, R.  
Transonic design using computational aerodynamics  
p0431 A82-35560

Numerical aircraft design using 3-D transonic  
analysis with optimization. Volume 1:  
Executive summary  
[AD-A110035]  
p0314 A82-21180

Numerical aircraft design using 3-D transonic  
analysis with optimization, volume 2. Part I:  
Transport design  
[AD-A110221]  
p0315 A82-21181

LORENCES, R.  
Thrust reverser induced flow interference on  
tactical aircraft stability and control  
[AIAA PAPER 82-1133]  
p0038 A82-37693

LOSE, D. C.  
Development of a preloaded hybrid advanced  
composite wing pivot fairing  
p0287 A82-27134

LOTTER, T. M.  
The effect of intake flow disturbances on APU  
compressor blade high cycle fatigue in the  
Airbus A300  
p0513 A82-40983

LOUIS, J. P.  
Heat transfer in turbines  
[AD-A111564]  
p0455 A82-26307

LOUSTALOT, B.  
The influence of new turbine technologies on their  
components  
p0207 A82-17210

LOVELACE, B.  
Impact of technology on avionics cost trends  
[AD-A108494]  
p0256 A82-18219

LOVELL, D.  
Transonic wind tunnel wall interference  
corrections for three-dimensional models  
[AIAA 82-0586]  
p0237 A82-24663

LOVELL, D.  
Material and process developments in the Boeing 767  
p0506 A82-40902

LOVELL, B.  
The Augusta A129  
p0045 A82-12337

LOVERING, P.  
Simulation report: Advanced display for complex  
flight trajectories  
[AD-A111259]  
p0457 A82-26320

LOVES, J. E.  
Applications of head-up displays in commercial  
transport aircraft  
[AIAA 81-2300]  
p0550 A82-13506

LOVES, J. E.  
Crashworthiness studies: Cabin, seat, restraint,  
and injury findings in selected general aviation  
accidents  
[AD-A114876]  
p0631 A82-29275

LOT, M. S.  
Trends in maintainability and reliability of  
avionics systems with particular reference to  
DCAP Technical Publication 1/77  
p1006 A82-16561

LOYD, R. M.  
Advanced composites integral structures meet the  
challenge of future aircraft systems  
p0288 A82-27133

LOZHIK, O. B.  
The stability of monocoque panels under bending  
p0334 A82-29836

LOZHIK, O. B.  
On the influence of the number of stages on the  
efficiency of axial-flow turbines  
[AIAI PAPER 82-06-43]  
p0421 A82-35301

LOZHIK, O. B.  
A new approach to modeling the cost of ownership  
for aircraft systems  
[AD-A104434]  
p1002 A82-13979

LOZHIK, O. B.  
Application and testing of metallic coatings on  
graphite/epoxy composites  
p0435 A82-37074

Efficient part removal processes  
p0436 A82-37097

Aerospace applications of composites  
p0547 A82-42675

LOXLEY, R. A.  
Commercial airborne weather radar technology  
p0075 A82-14868

LU, J.  
Approach for predicting supersonic  
normal force coefficient very-low-aspect-ratio  
lifting surfaces  
[AD-A111770]  
p0364 A82-23199

LUCKING, R. W.  
Recent advances in applying Free Vortex Sheet  
theory to the estimation of vortex flow  
aerodynamics  
[AIAA PAPER 82-0095]  
p103 A82-22045

LUDELL, M.  
Doppler processing, waveform design and  

B-90

PERSONAL AUTHOR INDEX
HACBAJH, J. C.

HABBI, D. G.

HACCBX, B.

HACCBX, B.

HABBI, J. B.

HACEAU, K. G.

BACDIABHID, P. B.

HACDIABUD, I. P.

HIBBI, J. H.

HABflBBiBI, J. C.

HACK, H. D.

HACFABLAIE, A. G. J.

HACDOIALO, G.

HACIBTIBE, I. B.

HACBHIC, J. A.

HACDOHALD, I. S.

Hultifunction multiband airborne radio architecture study (AD-A114427) p0528 R82-28523

HABBIT, C. C.

A simulator assessment of a wide field of view head-up display for presenting a FLIR sensor image during low level navigation and ground attack missions (NASA Paper 82-0261) p0184 R82-22079

HABIT, G. E.

Some remarks on buffetting (RAD-TR-78-800) p0319 R82-21216

HABIT, J. E.

A study of general aviation noise impact and annoyance (NASA-CR-165945) p0564 R82-31066

HABIT, J. H.

Graphics in numerical control - The user's challenge p0167 R82-20277

MACARTHUR, C. H.

Mathematical modeling of ice accretion on airfoils (AIAA Paper 82-0204) p0286 R82-27098

Dayton aircraft cabin fire model, version 3. Volume I: Physical description (AD-I17905) p0605 R82-33361

MACRAN, J. C.

An investigation of dual mode phenomena in a sustained bladed-disk (NASA Paper 81-DHT-133) p0462 R82-19347

Analysis of rotating structures using image derotation with multiple pulsed lasers and moire techniques p0434 R82-36999

MACRE, R.

On the influence of the number of stages on the efficiency of axial-flow turbines (NASA Paper 82-GT-43) p0421 R82-35301

MACCORMACK, R. M.


MACCRADFORD, L. R.

ESC clearance of modern military aircraft p0229 R82-24359

MACCRADFORD, P. H.

R/R/LCC effects of commercial off-the-shelf equipment p0565 R82-42101

MACDONALD, G.

Justification for, and design of, an economical programmable multiple flight simulator p0434 R82-36969

MACDONALD, L. S.

New technology for the next generation of commercial transports - Real or imaginary p0516 R82-41007

MACPHERSON, A. G. J.

Characteristic and principal gains and phases and their use as multivariable control design tools p0029 R82-10050

MACHIC, J. L.

The influence of aerontical R&D expenditures upon the productivity of air transportation (PB81-267140) p0167 R82-15984

MACHMURR, R. G. (NASA-TM-84506) p0612 R82-33552

MACK, R. D.

Basic studies of the flow fields of airfoil-flap-spoiler systems (NASA Paper 82-0173) p0184 R82-22060

MACKHALL, L. C.

In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8

MARCH, R. E.

Evaluation of Loran-C enroute navigation and non-precision approaches within the State of Vermont p0426 R82-28523

Certification of an airborne Loran-C navigation system p0433 R82-35076

Flight evaluation of LORAN-C in the State of Vermont p0523 R82-28278

MACRAIL, R. L.

Navstar Global Positioning System flight test program overview (AIAA Paper 81-2350) p0060 R82-13956

MACRAIL, R. L.

Compressor stall inducing installation effects of an engine control parameter for the CF-5 aircraft p0095 R82-13005

MACRAIL, R. E.

Testing of the 50J-5A ejection seat for the F/A-18 (GREAT/aircraft p0078 R82-19555

MADALON, D. J.

Multibody technology concept (AIAA Paper 82-0810) p0376 R82-31983

NASA research on viscous drag reduction p0505 R82-40896


NASA research on viscous drag reduction p0604 R82-33344

ADDIC, R. L.

Remodeling convective weather systems and aviation operations (AIAA Paper 82-0015) p0114 R82-17733

Remodeling convective complexes and general aviation p0580 R82-45832

ADDIC, R. L., Jr.

The case for helicopter hoisting (PB81-247140) p0147 R82-18160

ADDIC, R. P.


Tanker Airline/aircrew Complement Evaluation (TACE). Phase II: Simulation evaluation. Volume I: Crew system design (AD-A110956) p0543 R82-26291

ADDICK, L.

Aircraft post crash fire reduction/survivability enhancement from a manufacturer's viewpoint p0533 R82-29206

ADDISON, R.

Sensor stabilization requirements of RPVs - A simulation study p0494 R82-23741

ADDEN, L. P.

F-16B program overview and wind tunnel/flight correlation p0400 R82-25207

ADDIN, S.

On the sonic fatigue life estimation of skin structures at roo and elevated temperatures p0222 R82-23678

Design and experimental verification of the US-Th flap structure for the AL 50L aircraft p0508 R82-40917

AFLSTELLO, L.

Simulation of the fluctuating field of a forced jet (NASA-TM-84506) p0615 R82-34419

APPOLLO, G. C.

C & D on composite rotor blades at angles p0309 R82-37764

Material identification for the design of composite rotary wings p0509 R82-40937

MADDEN, R. B.

Reports by Systems Technology, Inc., in support of carrier-landing research in the visual technology research simulator

PERSONAL AUTHOR INDEX

HACBAJH, J. C. p0124 R82-10160

Flight evaluation of LORAN-C in the State of Vermont (NASA-TR-84711) p0523 R82-28278

HABBI, D. G. p0416 R82-35017

Flight evaluation of a digital electronic engine control system in an F-15 airplane (AIAA Paper 82-1080) p0438 R82-37683

HACCBX, B. B. p0124 R82-10160

Certification of an airborne Loran-C navigation system p0433 R82-35076

HACCBX, B. B. p0523 R82-28278

HACCBX, B. B. p0433 R82-35076
tip geometry on the interaction of torsional loads and performance for an articulated helicopter rotor [NASA TR 71-1262] p0097 882-13107

MARTZELA, P.
Design of compensated flutter suppression systems [AIAA 82-0128] p0038 882-37585

A general purpose program for rotor blade dynamics [AIAA 82-0596] p0237 882-24670

MAUST, J. L.
Prediction of cruciform missile inlet peak instantaneous distortion patterns from steady state and turbulence data using a statistical technique [AIAA PAPER 82-1009] p0248 882-18151

MALTER, J. F.
Transportation noise, its impact, planning and regulation [5-258] p0478 882-27864

MARELLE, E.
Air transportation of handicapped persons [AD-AI17441] p0220 882-24330

MAZAI, H. L.
The design of a wind tunnel VSTOL fighter model [AIAA PAPER 82-2635] p0242 882-25154

MACHICKI, L.
Toward all-composite helicopter fuselage [AIAA 82-0128] p0041 882-38223

MACHICKI, L. J.
The design, construction, and performance of composite fuselage components for the Boeing 234 helicopter [AIAA 82-27424] p0292 882-32430

MACHICDA, K. M.
Speech Command Auditory Display System (SCADS) ([AD-A117846]) p0069 882-33387

MACHMIC, K.
Air-frame integrated environmental conditioning system for trainer subsonic aircraft [AIAA PAPER 81-ENAS-33] p0012 882-10920

MACHMICH, K.
Trailing edge flap influence on leading edge vortex flap aerodynamics [AIAA PAPER 82-0128] p0115 882-17799

MACHMICH, K.
Fuselage effects in leading edge vortex flap aerodynamics [AIAA PAPER 82-0128] p0115 882-17799

MARDENH, R. L.
Evaluating the effectiveness of hydrorefining of the low-stability component of T-1 fuel [NAS9-78-0012] p0034 882-36673

MAZER, J. J.
Coaxial simulation of an advanced aircraft electrical system. p0073 882-14621

MAZER, C. J.
Experimental study of the effects of secondary air on the spanwise and stability of a lean premixed combustor [AIAA PAPER 82-1072] p0415 882-34992

MARDEN, K.
Preliminary functional description of integrated flow management (AD-A109909) p0313 882-21171

MARESCA, C.
An experimental and numerical study of 3-D rotor wakes in bowing flight p0510 882-40946

MARGASON, R. J.
Jet T/STOL wind-tunnel simulation and groundplane effects p0061 882-13973

MARGASON, R. J.
Jet T/STOL wind-tunnel simulation and groundplane effects p0061 882-13973

MARGASON, R. J.
A general purpose program for rotor blade dynamics p0248 882-18151

MARGOS, C. S.
A matter of seconds - A critical account of three notable air disasters /5th Major Miller Memorial Lecture 0081 882-15597

MARGOIS, D. L.
Sem-active fluid inertia - A new concept in vibration isolation [USNS PRRP 81-17] p0482 882-37789

MARGIELLE, R. K.
Digital image processing for acquisition, tracking, hand off and ranging p0471 882-27303

PERSONAL AUTHOR INDEX

BAEWS, J. L.
The promise of laminated metals in aircraft design p0506 882-40903

BAEWS, R. L.
Wind-tunnel evaluation of an aerodynamically conformable rotor [AIAA 81-114064] p0521 882-28260

BAKER, D. L.
The dispersion of drop sizes in gas turbine fuel nozzle sprays p0019 882-12107

BAKEFL, E.
Impact of technology on avionics cost trends [AD-A100894] p0526 882-18219

BAKEFF, S. L.
Generic Test Bed (GTB) aircraft [AIAA 81-110335] p0316 882-21776

BAKEF, D. L.
Ultralight airplanes p0119 882-35233

BAEFL, D. B.
a new approach to modeling the cost of ownership for aircraft systems [AD-A100894] p0102 882-13979

BAEF, R. L.
A CAD/CAM graphics system with relative datuas and tolerances [AIAA PAPER 81-ENAS-33] p0161 882-19333

BAF, S.
Stress antonely factor measurements in composite sandwich structures p0113 882-17535

BAF, D. B.
Optical tip clearance sensor for aircraft engine controls [AIAA PAPER 82-1131] p0436 882-37691

MARKE, R. S.
Cross and cross-coupling derivative measurements on the standard dynamics model at ARDC [AIAA 82-0596] p0237 882-24670

BAEF, S. L.
Evaluating and wind tunnel tests of the 4,000 Ib (normal-force) pitch/yaw and roll dynamic stability balance systems for measuring direct, cross, and cross-coupling derivatives [AD-A105122] p0085 882-12047

BAF, T. E.
The use of 'water bombers' and chemical agents against forest fires, taking into account the employment of a first-attack system p0331 882-29562

BAEF, R.
Recommenects for field measurements of aircraft noise [NASA-CR-3540] p0359 882-22955

BAEFL, R. L.
The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components [PNPB-90076] p0355 882-22771

MARSHALL, L. C.
Airworthiness and flight characteristics test of an OH-6C configured to a Light Combat Helicopter (LCH) [AIAA 81-112581] p0452 882-26286

MARSHALL, R.
Terrain model animation [AIAA 81-10971] p0215 882-17087

MARSHALL, R.
G.S. Army remotely piloted vehicle program p0493 882-39732

MARRELL, J.
LNAVSTAR Global Positioning System p0112 882-17310

MARRELL, R.
The YAB-64A composite flexible tail rotor p0270 882-26386

MARTZ, R.
The anatomy of a technology test bed - Integrated Flight/Fire Control-1 /IFPC 1/ (SAB PAPER 81-1016) p0232 882-24390

MARTZ, C. L.
A discussion of the flying quality requirements of a basic trainer aircraft [AIAA 81-114064] p0536 882-29318

MARTZ, C. F.
Linear decentralized systems with special structure p0388 882-34359

Baseline monitoring using aircraft laser ranging (NASA-TP-73298) p0529 882-26690
The effect of erosion wear on the vibration characteristics of axial-turbine blades

Aerodynamic investigations to determine possible reconfigurable change network for distributed flight control

Increasing the lift-to-drag ratio of a flat delta wing

New estimation method for flutter or divergence boundary from random responses at subcritical speeds

Analysis and Monte Carlo simulator of near-terminal aircraft flight paths

The Schladitz fuel injector: An initial experiment using F2871 turbofan engine

Aerodynamic noise generated by jet wing/flap interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using F2871 turbofan engine

Head up displays

A reconfigurable change network for distributed process control

Calibration of seven-hole probes suitable for high angles in subsonic compressible flows

Increasing the lift:drag ratio of a flat delta wing

Development and use of dynamic qualification standards for Air Force stores

Aerodynamic investigations to determine possible ice flight paths

Status and tracking system for flight test data products

The Federal Baseline Navigation Plan

The Space Shuttle vehicle checkout involving flight assurance software

Fire extinguishing materials

The Joint Airport Weather Studies project

Simulation of phagolob excitation due to hazardous wind shear

Numerical and flight simulator test of the flight deterioration concept

The Joint Airport Weather Studies Project

An experimental study of dynamic stall on advanced airfoil sections. Volume 1: Summary of the experiment

An experimental study of dynamic stall on advanced airfoil sections. Volume 2: Detailed study

An experimental study of dynamic stall on advanced airfoil sections. Volume 3: Complete results

Instrumented aircraft verification of clear-air turbulence detection and warning systems using Doppler radar

The balloon and the airship technological heritage

Current development of lighter than air systems

Development and validation of preliminary analytical models for aircraft interior noise prediction

Airborne Flight Test System (AFTS)

On matching the systems identification technique to the particular application

Utilization of AHAPS-94 side-looking airborne radar systems in search and rescue

Preliminary assessment of US Coast Guard Short Range Recovery (SIRR) Forward Looking Infrared (FLIR) system small target detection performance

An experimental study of dynamic stall on advanced airfoil sections. Volume 1: Summary of the experiment

Instrumented aircraft verification of clear-air turbulence detection and warning systems using Doppler radar

On matching the systems identification technique to the particular application

Utilization of AHAPS-94 side-looking airborne radar systems in search and rescue

Preliminary assessment of US Coast Guard Short Range Recovery (SIRR) Forward Looking Infrared (FLIR) system small target detection performance

Instrumented aircraft verification of clear-air turbulence detection and warning systems using Doppler radar
On the prediction of swirling flowfields found in cold-air performance of a 15.41-cm-tip-diameter calibration of the AMES anechoic facility. Phase flaximizing South Carolina's aviation resources: Aeroacoustic performance of an externally blown status of the national transonic facility turbulence measurements in a confined jet using a

Supersonic jet noise generated by large scale instabilities (NASA-TP-2072) [p0614 p0349 3109]

Aerostructure nondestructive evaluation by thermal field detection, phase 1: Fundamental information and basic technique development (AB-1112728) [p0595 p0324 2525]

Ceramic turbine housings (ASSE PAPER 82-09-293) [p0430 p0354 6345] Brittle materials design, high temperature gas turbine [p0191 p0324 16085]

Investigation of a rotor system incorporating a constant lift tip [p0531 p0292 2772]

Next generation turboprop gearboxes [p0492 p0354 184]

Design of airport pavements for expansive soils [AD-1112001] [p0041 p0324 11313]

Encounters with surge: Some experiences of development of axial compressors for aero gas turbines [PMA-90071] [p0355 p0222 274]

Design and development of a low cost servoed gyro for unmanned aircraft [p0016 p024 11932]

Comparison of acoustic data from a 102 sq cm nozzle as measured in the NASA 26-foot wind tunnel and the NASA Ames 40- by 80-foot wind tunnel [NASA-TR-81343] [p0190 p024 16083]

Analysis of integrated fuel-efficient, low-noise procedures in terminal-area operations [DEB-029633] [p0301 p024 13014]

Status of the national transonic facility [AIAA PAPER 82-0604] [p0381 p024 33326]

Wind-Tunnel/Flight Correlation, 1981 [NASA-CP-2225] [p0401 p024 25196]

Flight simulation consoles, aid or obstruction - Objective evaluation of control consoles of modern flight and tactics simulators [DGLR PAPER 01-097] [p0159 p024 19269]

Aeroacoustic performance of an externally blown flap configuration with several flap nose suppression devices [NASA-TP-1995] [p0400 p024 29490]

Optimizing South Carolina's aviation resources: Identifying potentially profitable commercial airline routes, volume 2 [PRA-1139353] [p0532 p024 29277]

Turbine blade nonlinear structural and life analysis [AIAA PAPER 82-1056] [p0415 p024 34901]

Calibration of the Ames anechoic facility. Phase 1: Short range plan [NASA-TR-006801] [p0191 p024 16091]

Experimental study of the flowfield of an airfoil with deflected spoiler [AIAA PAPER 82-0126] [p0266 p024 27086]

Cold-air performance of a 15.41-cm-tip-diameter axial-flow power turbine with variable-area stator designed for a 75-kW automotive gas turbine engine [NASA-TP-826049] [p0316 p024 21193]

On the prediction of swirling flowfields found in axisymmetric combustor geometries [AIAA PAPER 82-1262] [p0439 p024 37710]

Turbulence measurements in a confined jet using a six-orientation hot-wire probe technique [AIAA PAPER 82-12120] [p0419 p024 12120]
Integration of multi-sensor navigation data using optimal estimation techniques p0273 A82-25577

BAXT, G. L. 
Application of multiple model estimation techniques to a recursive terrain height correlation system p0070 A82-14768

A recursive terrain height correlation system using multiple model estimation techniques (AIAA 82-1513) p0048 A82-38937

BEDAH, J. Y. 
User's manual for interfacing a leading edge, vortex rollup program with two linear panel methods [NASA-TR-78584] p0604 A82-33340

BERNHEIM, K. M. 
Preliminary functional description of integrated flow management [AD-1099099] p0313 A82-21171

BERGHEIET-KITSCHANN, L. L. 
Corona and antenna effects on the CR-530 maneuvering helicopter and Baydast navigation set p0295 A82-27946

BERDINK, K. N. 
New trends and concerns in the airliner radio equipment market [SER PAPER 811760] p0955 A82-44238

BERDAD, L. M. 
Cavitation inception in spool valves p0105 A82-16428

BERESNIAK, W. C. 
Large scale model measurements of airframe noise using cross-correlation techniques p0284 A82-26966

Aerosound from corner flow and flap flow [NASA-CE-166396] p0284 A82-32081

BERMAN, J. S. 
Corrosion inhibiting engine oils [AD-A116127] p0135 A82-14099

BERMAN, G. W. 
The gas turbine engine p0325 A82-25687

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components [PH-90076] p0355 A82-22271

BERDSLE, L. L. 
Full power-by-wire replace power-by-hydraulics p0067 A82-14707

Advanced aircraft electrical system control technology demonstrator. Phase 1: Requirements analysis and conceptual design [AD-103922] p0031 A82-10326

Advanced aircraft electrical system control technology demonstrator. Phase 1: Analysis and preliminary design [AD-A113633] p0524 A82-20280

BERKOVICH, L. 
Multilevel optimum design of structures with fiber-composite stiffened-panel components [AIAA PAPER 80-0723] p0113 A82-17594

BERKOVICH, E. C. 
Structural modeling of high Reynolds number wind tunnel models [AIAA 82-0062] p0238 A82-26767

BERN, C. 
Response of nonlinear aircraft structural panels to high intensity noise p0018 A82-12041

BERRY, G. B. 
Experimental investigation of a transonic potential flow around a symmetric airfoil [NASA-TN-76676] p0131 A82-14057

BERRY, J. 
A European airline's future simulator requirements p0171 A82-20536

BERNOWITZ, L. 
Feedback control of a cantilever wing in steady airflow [AIAA 82-0729] p0340 A82-30177

BERNSON, M. K. 
Advanced subsonic transport propulsion [AIAA PAPER 81-0811] p0180 A82-20874

BERNIE, J. B. 
What the operator wants p0224 A82-24008

BELLINGHAM, P. A. & P. A. 
Formal specification and mechanical verification of STFS - A fault-tolerant flight control system p0366 A82-37446

BELLINGHAM, P. A. & P. A. 
Hierarchical specification of the STFS fault tolerant flight control system p0197 A82-17106

BELLON, N. R. 
Numerical and experimental examination of a precompressed/fuel mixture combustor [AIAA PAPER 82-1074] p0416 A82-34994

A spark ignition system for liquid fuel sprays designed for gas turbine engines p0436 A82-37220


BELKOV, M. V. 
The city and aviation p0149 A82-18098

BELLOCCO, J. M. 
Using voice control onboard combat aircraft p0092 A82-13056

BELLOSO, R. A. 
Methodology for multi-aircraft minimum noise impact landing trajectories p0218 A82-23037

BELLOSO, R. V. 
Basic problem of aircraft gas-turbine engine analytic design. II p0114 A82-11463

BENNETT, D. L. 
A documented example of strong wind shear p0360 A82-33274

BENNETT, J. P. 
A CAD/CAM graphics system with relative datums and tolerances [AIAA PAPER 81-0916] p0284 A82-19333

BENNETT, R. M. 
An on board supervisory system for applications in space missions [AIAA-577-09/327] p0256 A82-18126

BENNETT, J. S. 
Fate control aided integrated strike avionics system p0471 A82-27298

BELODSO, J. P. 

BERENDT, K. G. 
Operational testing of the LB-33 inertial navigation system p0380 A82-33854

BENEG, P. L. 
Preliminary results on performance testing of a turbocharged rotary combustion engine [NASA-28-02772] p0316 A82-21194

BERGHITZ, V. L. 
A study of wing vortex patterns p0502 A82-46261

BENSON, R. M. 
Remote sensing of turbine engine gases [AD-A115443] p0559 A82-30310

BERNAD, C. 
A reconfigurable change network for distributed process control p0197 A82-17108

BERNIE, C. 
Transonic wind tunnel test of a supersonic nozzle installation [AIAA PAPER 82-1045] p0437 A82-37677

BERNIE, C. E. 
Supercritical maneuvering fighter configuration. Wind-tunnel investigation at Mach numbers of 0.60 to 0.95 [NASA-TN-64513] p0567 A82-31303

BERRY, J. M. 
Development of an efficient procedure for calculating the aerodynamic effects of planform variation [NASA-CR-18489] p0137 A82-14529

BERNIE, C. M. 
Mechanical wear assessment of helicopter engines by ferrography [AD-A110772] p0454 A82-26305

BERNIE, J. M. 
Joint Anglo-American experience of the analysis of helicopter rotor blade pressure distribution p0430 A82-37770

BERNICK, V. E. 
A translational velocity control system for VTO
low speed flight  
[NASA-PB-82-20186]

A new model for aerofoil and fairings on high speed flight  
[NASA-PB-82-20186]

The role of modern control theory in the design of controls for aircraft turbine engines  
[NASA-PB-82-20262]

Identification of multivariable high performance turbofan engine dynamics from closed loop data  
[NASA-PB-82-20339]

The role of modern control theory in the design of controls for aircraft turbine engines  
[NASA-PB-82-22262]

Effects of approach lighting and variation in visible runway length on perception of approach angle in simulated night landings  
[AD-411019B]

BBEDTA, J. F.

Commercial coatings for aircraft gas turbine: A review of NASA sponsored research  
[NASA-PB-82-12216]

BBB, M.

Advanced compressor components. Phase 1: 1978 to 1979  
[BEST-FS-8-61-02S]

BBBS, H. M.

Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation  
[AD-11010212]

BBB, M.

Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design guide  
[AD-1101062]

BBBS, B. B.

Welding for low-cost advanced titanium airframe structures  
[NASA-2-23757]

BBB, M.

Advanced concepts for composite structure joints and attachment fittings. Volume 1: Design and evaluation  
[AD-11010212]

BBB, M.

Advanced concepts for composite structure joints and attachment fittings. Volume 2: Design guide  
[AD-1101062]

BBBS, B. B.

User's manual for the ASE flight path-trajectory simulation code  
[AD-82-00704]

BBBS, B. B.

The design of exact nonlinear model followers  
[AD-82-12152]

BBBS, B. B.

Application of the concept of dynamic trim control and nonlinear system inverses to automatic control of a vertical attitude takeoff and landing aircraft  
[NASA-81-2228]

BBBS, B. B.

A fault tolerant distributed microcomputer structure for aircraft navigation and control  
[BRR-P-27714]

BBBS, B. B.

Application of nonlinear system inverses to automatic flight control design: System concepts and flight evaluations  
[NASA-PB-82-11083]

BBBS, B. B.

Applications to aeronautics of the theory of transformations of nonlinear systems  
[NASA-PB-82-26262]

BBBS, B. B.

Cooled variable-area radial turbine technology program  
[NASA-PB-82-165408]

BBBS, B. B.

Techniques for modifying airfoils and fairings on aircraft using foam and fiberglass  
[NASA-PB-82-14845]

BBBS, B. B.

A unique flight test facility - Description and results  
[AD-40925]

BBBT, B. B.

Multibody aircraft study, volume 1  
[NASA-CH-65129-VOL-1]

BBBT, B. B.

Multibody aircraft study, volume 2  
[NASA-CH-65129-VOL-2]

BBBB, B. B.

Prediction of sound radiation from different practical jet engine inlets  
[NASA-CH-65130]

BBBB, B. B.

Development of an analytical technique for the optimization of jet engine and duct acoustic liners  
[NASA-CH-65130]

BBBT, B. B.

Prediction of sound radiation from different practical jet engine inlets  
[NASA-CH-65130]

BBBT, B. B.

Development of an analytical technique for the optimization of jet engine and duct acoustic liners  
[NASA-CH-65130]

BBBT, B. B.

The model 412 multi-bladed rotor system  
[NASA-2-26376]

BBBB, B. B.

Nonlinear structural and life analyses of a combustor liner  
[NASA-PB-82-24501]

BBBB, B. B.

Fracture mechanics criteria for turbine engine hot section components  
[NASA-PB-82-24501]

BBBB, B. B.

Exhaust emissions reduction for intermittent combustion aircraft engines  
[NASA-CH-65134]

BBBB, B. B.

An algorithms, invariant relative to the initial data, for implementing the polynomial contouring method  
[NASA-2-46628]

BBBB, B. B.

The effect of barriers on wave propagation phenomena: With application for aircraft noise shielding  
[NASA-CH-65128]

BBBB, B. B.

Design of higher harmonic control for the ABC  
[NASA-2-26380]

BBBB, B. B.

Aeroelastic analysis of the elastic gimbal rotor demonstrator development specifications  
[NASA-PB-82-14977]

BBBB, B. B.

Energy efficient engine shroudless, hollow fan blade technology report  
[NASA-CH-65586]

BBBB, B. B.

Prediction of flyover jet noise spectra from static tests  
[NASA-PB-82-11089]

BBBB, B. B.

Air-air collision avoidance system  
[AIAA-82-33219]

BBB, B. B.

Air-air collision avoidance systems  
[AIAA-82-33219]

BBB, B. B.

The effect of coolant flow on the efficiency of a small engine  
[AIAA-82-33219]

BBB, B. B.

Adaptation and first cryogenic operation of T2 Onera/CEdT wind tunnel  
[NASA-PB-82-33219]
BIBLIOGRAPHY

HILLER, B. J.
NASA V/STOL Propulsion Control Analysis - Phase I
and II program status
[ACIA PAPEB 81-2632] p0108 A82-16908
A portable, low-cost flight-data measurement and recording system
[BIBA-TEB-84229] p0350 A82-22478

MILLS, R. A.
Reduction of the acoustic environment in an T100-PW-100 engine test cell
p0128 A82-10727
Prediction of aircraft interior noise using the statistical energy analysis method
[ACIA PAPEB 81-057-102] p0161 A82-19332
Acoustic measurements of T100-PW-100 engine operating in hush house NSN 4920-02-070-2721
p0180 A82-19952
Acoustic measurements of F/A-18 aircraft operating in hush house, NSN 4920-02-070-2721
p0309 A82-21041
Acoustic measurements of F-15 aircraft operating in hush house, NSN 4920-02-070-2721
p0310 A82-21042
Acoustic measurements of F-16 aircraft operating in hush house, NSN 4920-02-070-2721
p0310 A82-21043

HILLS, R. V.
Large scale model measurements of airframe noise using cross-correlation techniques
p0204 A82-26966

HILLSGOOD, R. P.
Adaptive multifunction sensor concept for air-ground missions
p0471 A82-27299

HILL, J. E.
Foreign object damage in naval aircraft engines
[AD 1055787] p0135 A82-14098

Digital avionics: Promise and practice - An airline's experience in the field
p0017 A82-11942

HILL, E. J.
In-flight radiography of titanium spar tube welds
p0501 A82-40538

HILL, E. J.
Application of integration algorithms in a parallel processing environment for the simulation of jet engines
[ACIA-TEB-82766] p0138 A82-14049

HILLY, R. W.
A method for locating aircraft wing damage by nonlinear vibration analysis
p0109 A82-17116

HIYAMA, K.
An aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine [ACIA-TEB-3217]
p0097 A82-13109

HIYAMA, K.
Effect of mean blade loading on supersonic cascade flutter
p0143 A82-15059

HIYAMA, K.
Digital avionics - Advances in maintenance designs
p0167 A82-20294

HIYAMA, K.
Lifting surface theory for wings in low frequency small amplitude yawing and side slapping oscillating motions at low speeds
p0131 A82-14061

HIYAMA, K.
Doppler processing, waveform design and performance measurements for some pulsed Doppler and STD-radars. II
p0390 A82-34671

HIYAMA, K.
Development of high loading, high efficiency axial flow turbine
p0563 A82-47069

HIYAMA, K.
Selection of telecommunications equipment - A new approach to the equivalent noise concept
p0243 A82-25510

HIYAMA, K.
Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack
[ACIA PAPEB 81-2621] p0156 A82-19208

HIYAMA, K.
Study of the effects of maneuver compensation on beam pointing accuracy
p0284 A82-26966

B-102

PERSONAL AUTHOR INDEX

HILLBARD, L. E.
A perspective of computational aerodynamics from the viewpoint of airplane design applications
[ACIA PAPEB 82-0010] p0163 A82-22028
Computational aerodynamics - Its coming of age and its future
p0302 A82-13109

HILDEBRAND, L.
Evaluation of full potential flow methods for the design and analysis of transport wings
p0432 A82-35567

HILDEBRAND, L.
Limiting payload deceleration during ground impact
[ACIA PAPEB 81-1918] p0006 A82-10404

HILDEBRAND, L.
Inverse heat-transfer problems - Domains of application in the design and testing of technical systems
p0274 A82-25971

HILDEBRAND, L.
Lubricant effects on efficiency of a helicopter transmission
p0412 A82-35520

HILDEBRAND, L.
Target acquisition system/air-to-surface weapon compatibility analysis
[ACIA PAPEB 82-1618] p0486 A82-38995

HILDEBRAND, L.
Flying qualities requirements for roll CAS system
[ACIA PAPEB 82-1356] p0496 A82-90287

HILDEBRAND, L.
Summary and recent results from the NASA advanced high-speed propeller research program
p0497 A82-20419
Summary and recent results from the NASA advanced High Speed Propeller Research Program
[ACIA-TEB-83578] p0470 A82-26219

HILDEBRAND, L.
BDE of composite rotor blades during fatigue testing
p0335 A82-24413

HILDEBRAND, L.
SDI terrain reflection model applied to ILS glide scope
p0218 A82-23027

HILDEBRAND, L.
Bringing the gap from aircraft to space computers
[ACIA PAPEB 81-2142] p0002 A82-10101

HILDEBRAND, L.
An airline's view of the corrosion problem
p0311 A82-17352

HILDEBRAND, L.
FAX/VSX aviation route forecast/AMP development
[ACIA PAPEB 82-0013] p0163 A82-22027
The aviation route forecast/AMP program - An interactive system for pilot self-briefing
p0553 A82-39821
The Aviation Route Forecast/AMP program - An interactive system for Pilot Self-Briefing
[ACIA-TEB-82625] p0580 A82-65830

HILDEBRAND, L.
Geophysical flight line flying and flight path recovery utilizing the Litton LTV-76 inertial navigation system
[ACIA-TEB-85555] p0534 A82-29292

HILDEBRAND, L.
Sensitivity of helicopter aero-mechanical stability to dynamic inflow
p0273 A82-25773

HILDEBRAND, L.
A method of accounting for the effect of aircraft deformations on its loading
p0380 A82-34177

HILDEBRAND, L.
Acceleration response of fuselage sidewall panels on a twin-engine, light aircraft
p0129 A82-18729
Interior noise considerations for advanced high-speed turboprop aircraft
[ACIA PAPEB 82-1121] p0416 A82-35016

HILDEBRAND, L.
Implicit model-following technique - Application to the design of longitudinal stability augmentation systems
p0551 A82-43571

HILDEBRAND, L.
Extended time radar raw video recording
p0075 A82-14909

HILDEBRAND, L.
One year flight testing of the Transonic Wing
vehicle parachute systems

SOUGLI, R.
The operational characteristics of turbojets, giving particular attention to the cooled, high-pressure turbine

SOLCASE, D. M.
Analytical design and validation of digital flight control system structure [AIAS PAPER 82-1626]

SOLLENDIAG, R. G.
Stereoscopic projection in the National Aerospace System

Design and implementation of efficient algorithms for automatic determination of corrected slant range [AD-A112248]

SOLLE, J., Jh.
Integration of a code for aerelastic design of conventional and composite wings into AC3IIBT, an aircraft synthesis program [NASAC-CH-137002]

SOLLE, M.
Control of vibration in aeroelastic cascade experiments

SOLLE, R. C.
The interface of multifunction controls and displays to tomorrow's avionics

SOLLEK, R. E.
Evaluation of an experimental technique to investigate the effects of the engine position on engine/pylon/wing interference [NASA-CS-167679]

SOIT, E. N. W.
Computer modeling of fan-exit-splitter spacing

SOKOLO, R. K.
The operational characteristics of turbojets, giving particular attention to the cooled, high-pressure turbine

SOKOLO, R. A.
Application of Computational Fluid Dynamics (CFD) in transonic wind-tunnel/flight-test correlation

SOKOLO, A.
Turboprop and turbojet engine optimization

SOKOLO, C. P.
A laboratory evaluation of the suitability of a xenon flashtube signal as an aid-to-navigation [AD-A110729]

SOKOLO, J. L.
Civil helicopter propulsion system reliability and

B-105
BIBBS, A. F.

BIBBS, C. B.

BIEHS, L. P.

BIBBS, O.

BIBBOFF, I.

BOSSEHSEA, A.

BOS, F.

flOSIOC, S. B.

BOBTH, I. T.

HOSGA, B. J.

BOBTBI, S. S.

BOBSTBI, B. S.

BOBPHX, I. J.

BOBPHI, K. P.

BOBPBI, A. T.

BOBPBI, P. C.

BOBPBI, S. I. B.

BDHBI, 0. B.

BOBPBI, 0. B.

BOBPBI, P. C.

Cannibalization of the F-14 and S-3A aircraft: A viability logistic [AD-A111207] p0393 882-24163

MURPHY, L. P.

Engine monitoring technology assessments [AIAA PAPER 82-40518] p0499 882-40518

MURPHY, L. P.

Assessment of lightning simulation test techniques, part 1 [AD-A116262] p0477 882-27663

MURPHY, P. C.

Determination of airplane model structure from flight data by using modified stepwise regression [NASA TP-1916] p0028 882-10041

MURPHY, W. J.

Integrated Flight/Weapon Control design and evaluation [AIAA PAPER 82-14741] p0068 882-14741

MURR, D. G.

High angle-of-attack characteristics of a forward-swept wing fighter configuration [AIAA PAPER 82-11221] p0467 882-39099

Effects of vortex flaps on the low-speed aerodynamic characteristics of an arrow wing [NASA TP-1914] p0033 882-11013

MURR, L. V.

Recent sidewall boundary-layer investigations with suction in the Langley 0.3-a Transonic Cryogenic Tunnel [AIAA PAPER 82-02339] p0117 882-17858

MURTHA, R. S.

Subsonic and transonic roll damping measurements on Basic Finner [AIAA PAPER 82-19958] p0165 882-19958

MURTHA, S. M.

Water ingestion into jet engine axial compressors [AIAA PAPER 82-0196] p0117 882-17836

Water ingestion into axial flow compressors. Part 3: Experimental results and discussion [AD-A116236] p0537 882-29326

Effect of water ingestion on axial flow compressors. Part 2: Computational program [AIAA PAPER 82-14831] p0537 882-29327

MURTHA, S. S.

Finite element analysis of some aerospace shell structures [AIAA PAPER 82-33515] p0302 882-33515

MUSCA, M. J.

Feasibility study of a 270 V dc flat cable aircraft electrical power distribution system [AD-A116026] p0528 882-28552

MUSICK, S. E.

Evaluation of sources of error in E/A/GE/HAS navigation using a Kalman postprocessor [AIAA PAPER 81-14739] p0068 882-14739

MUSICK, S. E.

Material identification for the design of composite rotary wings [AIAA PAPER 82-40937] p0509 882-40937

MUSSTRENS, L.

A parametric study of dynamic response of a diode bonded shell of revolution [ASME PAPER 81-DET-137] p0162 882-19349

MYERHOFF, R.

Estimation of the number of in-flight aircraft on instrument flight rules [AIAA PAPER 82-01117] p0518 882-41117

MYERS, A. P.

A MATLAB onboard flight computer system architecture [AIAA PAPER 81-21077] p0001 882-10082

MYERS, G.

Advanced stratified charge rotary aircraft engine design study [NASA CR-165398] p0478 882-27763

MYERS, T. E.

Recent propulsion system flight tests at the NASA Dryden Flight Research Center [AIAA PAPER 82-2438] p0555 882-13874


MYERS, T. T.

Development of a tentative flying qualities criterion for aircraft with independent control of six degrees of freedom: Analysis and flight test [NASA CR-165398] p0478 882-22191

MYSTE, E. L.

Cannibalization of the F-14 and S-3A aircraft: A viability logistic [AD-A111207] p0393 882-24163

YOKER, E. N.

Personal Author Index

YURCH, J. M.

Problems and options in advanced composite repair [AIAA PAPER 82-27165] p0280 882-27165

YURBER, L. M.

A concept for light-powered flight [AIAA PAPER 82-1214] p0416 882-35067

YURBER, L. M.

Development and testing of dry chemicals in advanced extinguishing systems for jet engines [NASA CR-165011] p0101 882-13186

YUSLE, J. C.

The influence of smart computers on the cockpit of the future [AIAA PAPER 82-14743] p0069 882-14743

YUS, V. Y.

Design, fabrication and testing of an electrical analogue for heat transfer to coated turbine blade [AIAA PAPER 82-33520] p0362 882-33520

YUSKIN, J. M.

Conceptual design study for an advanced cab and visual system, volume 1 [NASA CR-166235] p0140 882-25266

Conceptual design study for an advanced cab and visual system, volume 2 [NASA CR-166236] p0140 882-25267

YUSKIN, J. M.

Comparative study of flare control laws [NASA CR-164903] p0027 882-10032

YUSKIN, J. M.

The mounting tendency of fuels containing polynuclear aromatics in a research combustor [AIAA PAPER 82-02939] p0164 882-19791

Fuel microencapsulation for jet engine smoke reduction [ASME PAPER 82-07-33] p0420 882-32924

YUSKIN, J. M.

Dynamic stability of a buoyant quad-rotor aircraft [AIAA PAPER 82-02424] p0117 882-17861

Hover stability of a vehicle with a towed body [AIAA PAPER 82-1387] p0382 882-33520

Performance characteristics of a buoyant quad-rotor research aircraft [AIAA PAPER 82-04994] p0513 882-40974

YUSKIN, J. M.

The stability of monocoque panels under bending [AIAA PAPER 82-29036] p0334 882-29036

YUSKIN, J. M.


YUSKIN, J. M.

Torsional vibrations of non-uniform rotating blades with attachment flexibility [AIAA PAPER 82-26313] p0276 882-26313

YUSKIN, J. M.

Ejector powered propulsion and high lift subsonic wing [AIAA PAPER 82-40970] p0512 882-40970

YUSKIN, J. M.

Aerodynamic research applications at Boeing [AIAA PAPER 82-14100] p0515 882-14100

YUSKIN, J. M.

Opportunities for wind-tunnel/flight correlation with new Boeing airplanes [AIAA PAPER 82-25206] p0404 882-25206

YUSKIN, J. M.

Comparison of different nozzle concepts for a reheated turbofan [AIAA PAPER 82-13077] p0094 882-13077

YUSKIN, J. M.

The Shock and Vibration Digest, volume 14, no. 7 [AIAA PAPER 82-13877] p0393 882-13877

YUSKIN, J. M.

The Shock and Vibration Digest, volume 13, no. 9 [AIAA PAPER 82-13877] p0393 882-13877

YUSKIN, J. M.

The Shock and Vibration Digest, volume 13, no. 3 [AIAA PAPER 82-13877] p0393 882-13877

YUSKIN, J. M.

Improved methods in ground vibration testing [AIAA PAPER 82-3778] p0441 882-3778

YUSKIN, J. M.

Error minimization in ground vibration testing [AIAA PAPER 82-40550] p0502 882-40550

YUSKIN, J. M.

Structural system identification technology verification [AIAA PAPER 82-40550] p0502 882-40550
The equivalent simple body (ESB) method for transonic wing analysis

Acoustic similarity laws for centrifugal fans

Effect of fleet size on estimates of safety against airframe fatigue

Airframe effects on top-mounted inlet systems for STOL fighter/attack aircraft

Isolated nacelle performance - Measurement and simulation

Aerodynamics systems for helicopter integration

Heat release rate calometry of engineering plastics

An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil

How large should a computer transport be

Microprocessor flight control application study

Analytical design and validation of digital flight control system structure

Modeling solid-fuel ramjet combustion including radiation heat transfer to the fuel surface

An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas emissions

Noise and economic characteristics of an advanced blended supersonic transport concept

Flow and pressure field of a model propeller

The Power Pair Locus - A preliminary design aid to select power ratings for multi-engined helicopters

Darboux points in minimum-fuel aircraft landing problem

Maximum fuel horizontal flight paths in the terminal area

LV measurements with an advanced turboprop

A synthesis technique for highly uncertain and interacting multivariable flight control systems

The DUBPO system - Materials means and logic functions

Fluctuating forces and rotor noise due to distorted inflow

Flowfield and noise sources of jet impingement of flaps and ground surface

Dynamic qualification testing of F-16 equipment

A method for locating aircraft wing damage by nonlinear vibration analysis


Analysis of small-aspect-ratio lifting surfaces and ground effect

Numerical design of the contoured wind-tunnel liner for the NASA swept-wing LFC test

Comparison of analytical and wind-tunnel results for flutter and gust response of a transport wing with active controls

Effects of wing-leading-edge modifications on a high-angle-of-attack aerodynamic characteristics wing with active controls

Engine for air transport

The induction of current in aircraft wiring

Hardware and software integration for concurrent data acquisition and reduction of photon correlated laser Doppler velocimetry
BIBDLIB6, L. G.
MBOBaailBB. B. J.
BIBBBBDIIB. B. C.
BICOLAI, C.
IlKITIIA, B. ».
BIKITI8, A. I.
IIKIFOBOI. P. I.
IIGBTIIGAIB. S. J.
8IBHEIBB, B. A.
HIBflAIH, J. B.
BIBLSBB, B. B.
IISBIOEA, K-
HIPPBBSS, K. B.
BIKIFOBOTA. T. C.
BXCBOLSOB. J. B.
Jet fuel from carbon
Beat transfer optimised turbine rotor blades - An
Formability of metallic aaterials - 2000 A.O.;
Octave bandwidth dual polarized antenna
Static investigation of the circulation control
Integrity analyses of surface-flawed aircraft
Performance estimation from non-steady manoeuvres
Hechanism for the elimination of instability in a
The technology of the assembly of engines for
Application of nultivariable model following
Analytical control lav for desirable aircraft
A study of potentially low cost millimetre-wave
Airborne lidar measurements of smoke plume
distribution, vertical transmission, and
particle size
Climatic laboratory evaluation TCH-47D helicopter
Forbability of metallic materials - 2000 A.O.;
Proceedings of the Symposeum, Chicago, IL, June
24, 25, 1980
NIGHTCAGE, S. J. A study of potentially low cost millimetre-wave
radiometric sensors
HEIFOROVA, T. C. Jet fuel for carbon
HEIFORO, P. W. Analytical control law for desirable aircraft
lateral handling qualities
Application of multivariable model following
method to flight controller
[KAMPA PAPER 82-1394]
NITZ, L. M. The technology of the assembly of engines for
flight vehicles
[NITZ, L. Y. Mechanisms for the elimination of instability in a
shiny problem
[HEIFORSE, B. A calculation method for slender wing-body
configurations in supersonic flow at high angles
of attack
[ENAV-PSW-79-15] p0098 A82-13115
HEIFRESS, E. M. Performance estimation from non-steady manoeuvres
[KAMPA PAPER 81-2424]
NISBIDE, K. On unsteady aerodynamic forces and moments of the
circular cascading blades /Experiments of the outwards-flow case/
[NITZ, L. Y. Integrity analyses of surface-flawed aircraft
attachment lugs - A new, inexpensive, 3-D
altering method
[KAMPA 82-0742] p0336 A82-30107
HEIFRESS, E. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRES, E. Transonic flow past thin wings
HOBES, R. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRESS, R. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRESS, E. Transonic flow past thin wings
HOBES, R. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRESS, E. Transonic flow past thin wings
HOBES, R. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRESS, E. Transonic flow past thin wings
HOBES, R. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRESS, E. Transonic flow past thin wings
HOBES, R. A high-frequency transonic small disturbance code
for unsteady flows in a cascade
[KAMPA PAPER 82-0955] p0374 A82-31932
HEIFRESS, J. A Instrumentation remote 'mini' ground station
p0179 A82-20770
HEIFRESS, E. M. Development of flying qualities criteria for
single pilot instrument flight operations
[HASA-CR-165932] p0533 A82-29288
HEIFRESS, E. Transonic flow past thin wings
NORRAN, R. H.
Acceptance testing of the Calpan variable
stability Learjet

NORRIS, D.
The mechanical testing of compressors and turbines
for aircraft gas turbine engines

[NASA-Paper 75-2-247] p0048 A82-35426

NORRIS, R. W.
Scratch suppression in supersonic jets

[AIAA Paper 82-1259] p0114 A82-17753

NORTHELF, J.
Algorithms development for infra-red air-to-air
guidance systems

p0218 A82-22905

NORTON, J. M.
Statistical analysis methods for characterizing
composite materials

p0290 A82-27162

NORTON, J. J. G.
Emission measurements of a transonic nozzle
guidance vanes

[NASA Paper 82-07-247] p0048 A82-35426

NORWOOD, R.
Advanced stratified charge rotary aircraft engine
development

[NASA-CR-165398] p0078 A82-27743

NOSER, R. H.
Optimizing aerospace structures for manufacturing
cost

p0516 A82-81414

NOSE, H.
Development of high loading, high efficiency axial
flow turbine

p0583 A82-47069

Nouvace, R. N.
An aerodynamic design and the overall stage
performance of an air-cooled axial-flow turbine

[NAL-TR-3717] p0097 A82-1309

NOVACI, M. III
A unique integrated flight testing facility for
advanced control/display research

[AIAA Paper 81-2490] p0056 A82-13919

NOVACI, M. M.
A prototype interface unit for microprocessor-based
Loran-C receiver

[NASA-CR-164687] p0032 A82-14078

A prototype interface unit for
microprocessor-based Loran-C receiver

p0446 A82-26210

NOVAD, A. A.
On the question of trailing airplane motion

p0015 A82-11470

NOVAK, R. N.
Optimal target designation techniques

[AD-A102937] p0293 A82-27709

NOVAK, R. A.
A mixed-flow cascade passage design procedure
based on a power series expansion

[NASA Paper 82-07-121] p0245 A82-35351

NOVAK, R. C.
Development of low modulus material for use in
ceramic gas path seal applications

[NASA-CR-165697] p0027 A82-10039

NOVICK, A. S.
Low NOx heavy fuel combustor concept program

[NASA-CR-165637] p0013 A82-25635

NOVICK, L. B.
Determination of antioxidant content in aviation
oils using thin-layer chromatography

p0548 A82-42994

NOVOSHOLOV, G. Z.
Optimization of requirements on the
putting-prevention properties of turbojet-engine
oils

p0082 A82-15723

NOVOSHOLOV, V. A.
A simplified wing procedure in connection with the

D-110

PERSONAL AUTHOR INDEX

NOVOSHOLOV, V. S.
Lifting line theory and the doublet-lattice method

p0015 A82-19195

NOVARA, P. S.
Reliability centered maintenance

p0223 A82-24001

NOVEMBER, R.
An experimental and numerical study of 3-D rotor
wakes in hovering flight

p0510 A82-40946

NOVEMBER, R. C.
Developmental possibilities in civil aviation in the
Federal Republic of Germany

p0350 A82-22230

NOVEMBER, J.
Recent propulsion system flight tests at the NASA
Dryden Flight Research Center

[AIAA Paper 81-2438] p0055 A82-13874

NOVEMBER, C. B.
Selected results of the F-15 propulsion
interactions program

[AIAA Paper 82-1041] p0415 A82-34976

NOVEMBER, H. M.
A report in the theory of spiral search

p0466 A82-27262

NOVEMBER, H. M.
The effect of the shape of a body on the
efficiency of its utilization as a flap stabilizer

p0281 A82-26843

NOVEMBER, R. C.
The Flight Service Automation System (FSAS) system
benchmark. Volume I: Summary, introduction and
concepts

[1982-143538] p0468 A82-27277

OBARSON, C. J.
Observations and implications of natural laminar
flow on practical airplane surfaces

p0505 A82-40893

OBREEAPP, R. L.
The electromagnetic theta gun and tubular
projectiles

p0125 A82-18182

OBREHINE, R. L.
Tornado-avionics development testing

p0177 A82-20760

OBREHINE, P.
Some comments on the prediction of forward flight
effects on jet noise

[APIS-20/1981] p0531 A82-29118

OBREHINE, E.
Theoretical investigations on the influence of
different strake, tail unit, and conventional
HML arrangement as well as of CC7 on the
aerodynamic characteristics of fighter aircraft
configurations

[850-PI-122/S/POR/36] p0255 A82-18211

OBREHINE, L. P.
Problems in the statement of the thermal-stress
analysis of flight vehicles

p0293 A82-27509

OBREHINE, P. J.
Real-time simulation of helicopter IFR approaches
into major terminal areas using RRAV, ELK, and
CCTI

[AIAA Paper 82-0260] p0018 A82-17868

OBREHINE, C.
Advanced composites integral structures meet the
challenge of future aircraft systems

p0268 A82-27133

OBREHINE, A. C.
Determination of the trimmed drag of an aircraft

p0127 A82-18583

OBREHINE, C.
Technology overview for advanced aircraft armament
systems program

[AD-A107650] p0201 A82-17155

OCH, H.
Aging of composite rotor blades

p0440 A82-37771

OCHREHINE, R. L.
TF 102 in-duct combustor noise measurements with a
turbine nozzle, volume 1

[NASA-CR-165566-VOL-1] p0309 A82-21031

TF 102 in-duct combustor noise measurements with a
turbine nozzle, volume 2

PERSONAL AUTHOR INDEX

OBEIL, P. J.

OBEIL, J. J.

OBEIL, T.

OBEIL, P. F.

OBEN, R.

OBEY, B. W.

OBEY, H. N.

OBEY, J. C.

OBEY, H. A., III

OBEY, J. M.

OBEY, B. B.

OBEY, B. 

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, J. C.

OBEY, B. A.

OBEY, B. L.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.

OBEY, B. D.

OBEY, B. H.

OBEY, B. S.

OBEY, J. G.

OBEY, P. J.

OBEY, B. J.

OBEY, C. J.

OBEY, B. A.

OBEY, B. J.

OBEY, C. C.
Direct comparison of community response to road traffic noise and to aircraft noise

Threat perception while viewing single intruder

Optical properties of airfield lighting fixtures

TDBBOTBAHS - A programming language for the implementation overall numerical characteristics

of the Boyal Netherlands Airforce. Part 2: Bearing element design, bearing element

applications, steady state spin trajectories in search operations

and handling characteristics

Engine dynamic analysis with general nonlinear finite element code: II - Bearing element

implementation, overall numerical characteristics and benchmarking

[ASME PAPER 82-072-292] p0403 A82-35462

Engine dynamic analysis with general nonlinear finite element code. Part 2: Bearing element

implementation overall numerical characteristics and benchmarking

[NASA-CH-167949] p0609 A82-33390

Welding for low-cost advanced titanium airframe structures

A system design for a multielement sensor using two-dimensional solid-state imaging arrays

A system design for a multipurpose sensor using two-dimensional solid-state imaging arrays

The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades

Structural modification to achieve anti-resonance in helicopters

Experimental verification of an aerodynamic parameter optimization program for wind tunnel testing

Solution to a bistable vibration problem using a plain, uncentralized squeeze-film damper bearing

Development of a nylon-fowler recovery system for the CL-289 /AB/OSD 502/ surveillance drone

Solution to a cockpit display of traffic information

Separation monitoring with four types of predictors on a cockpit display of traffic information

Direct comparison of community response to road traffic noise and to aircraft noise

TURBOBATS - A programming language for the performance simulation of arbitrary gas turbine engines with arbitrary control systems

Investigation of low order lateral directional transfer function models for augmented aircraft

Applications of structural adhesives in production

An estimation of aerodynamic forces and moments on an airplane model under steady state spin conditions

Basic technology of squeeze-film dampers for rotor dynamics control

Analyses of tapered-land hybrid aerostatic journal bearings

Numerical experiments on unsteady flows through cascading cascades

Investigation of the tip clearance flow inside and at the exit of a compressor rotor passage

Honeycomb cored structures

The coupling of electromagnetic interference into aircraft systems

Aircraft aerodynamic noise during approach

Coke edge instability - A criterion for safe crack propagation limit in thin sheets

Reliability model for planetary gear

Prediction and performance of radome-covered reflector antennas

Radiation enhancement by nonequilibrium during flight through the Titan atmosphere
PARK, D. R.

Simulation report: Advanced display for complex flight trajectories
[AD-A1112259] p0457 A82-26320

PARK, G. D.
Determining hinge moments and unspennage airflow parameters from flight data for Learjet airplanes
p0044 A82-13120

Determination of LearJet Longhorn airplane horizontal tail load and hinge moment characteristics from flight data
[NASA PST-82-0483] p0116 A82-17027

PARK, P. L.
Investigation and evaluation of a computer program to minimize three-dimensional flight time tracks
[NASA CP-168419] p0215 A82-17079

PARK, B.
Digital simulation of aircraft electrical generating system by means of Sceptre program
p0073 A82-14820

PARK, G. L.
A unified approach to helicopter NASA/FAR modeling
[ABES PREPRINT 81-22] p0443 A82-37793

PARK, J. L.
Test methodology for evaluation of fireworthy aircraft seat cushions
p0332 A82-29596

Fireworthiness of transport aircraft interior systems
p0533 A82-29204

PARK, L. C.
Inflight IFR procedures simulator
[NASA-CR-12318-1] p0537 A82-29331

PARK, L. W.
Airborne warning systems for natural and aircraft-initiated lightning
p0432 A82-35729

The effect of induced sound on the flow around a rectangular body in a wind tunnel
p0276 A82-26194

PARK, V. W.
Effect of tip vortices on the performance and flow field of a rotor in hover
p0498 A82-40511

PARK, J. A.
An approach to software for high integrity applications
[ABES PAPER 82-02-251] p0429 A82-35430

PARKINSON, D. W.
Torsional vibrations of a wing carrying a concentric load/ asympotic behavior/
p0126 A82-18620

PARKINSON, E. W.
The application of NASTRAN differential GPS in the civilian community
p0235 A82-24045

PARKINSON, R. C. G.
An operational model of specific range for microprocessor applications in piston-prop general aviation airplanes
[AFRA 81-22330] p0052 A82-13526

PARK, S.
Chasing propulsion's future - The ATP results
[ABES PAPER 82-1139] p0417 A82-35023

PARK, D. L.
Advanced display-control concepts for power plant operation
p0275 A82-26121

PARK, S. L.
Analysis of flight test measurements in ground effect
p0178 A82-20763

PARK, J. L., Jr.
Automated pilot advisory system
[NASA-TM-73296] p0140 A82-15027

PARK, F. C.
Applications of adaptive control systems
p0293 A82-27865

PARK, E. H.
Testing of the Kepler Airborne Observatory 91-CH Telecon
[NASA-CR-165381] p0400 A82-25040

PARK, D. L.
A-7 software module guide
[AD-A108649] p0260 A82-18920

PARISH, L. L.
Early noise evaluation of the A-7 airplane configured with automatic maneuvering flaps

PERSONAL AUTHOR INDEX

PAISLEY, P. D.
Proceedings: Fifth Annual Workshop on Meteorological and Environmental Inputs to Aviation Systems
[NASA-CR-27192] p0310 A82-21139

PARKER, E. L.
Aircraft/Airport compatibility - A constant challenge for aircraft designers
p0242 A82-25119

PARKHETA, G. V.
Determination of the glide path of an aircraft with power off
p0388 A82-34154

PASKA, E. A.
Effects of higher order control systems on aircraft approach and landing longitudinal handling qualities
p0563 A82-30848

PASSMORE, R.
Applications of weapon system operational utility studies on manned air combat simulators
[AFRA 81-22330] p0047 A82-13463

PAPL, S. P.
Long duct nacelle aerodynamic development for DC-10 derivatives
[NASA-CR-159271] p0586 A82-22315

Investigation of the interference effects of mixed flow long duct nacelles on a DC-10 wing
[NASA-CR-159202] p0586 A82-22319

PAPP, P. A.
Investigation on rotating spherocylinders
p0413 A82-26162

PARKERSON, R.
High temperature, short term tensile strength of C6000/PFR-15 graphite composites
[AFRA 82-0711] p0337 A82-30125

PARKERSON, J. E.
Aircraft fire resistance data
[AFRA NGR-60-204] p0025 A82-10020

PATTERSON, T. E.
Impact of an omni directional traffic alert and collision avoidance system on the air traffic control radar beacon system and the discrete address beacon system
[AFRA 81-11671] p0587 A82-32336

PATTERSON, J. D.
Air supply system for Boeing 767 airplane
[AFRA PAPER 81-EHA-5-7] p0011 A82-10895

PATTERSON, W. K.
Impedance modeling of acoustic absorbing materials for aircraft engine applications
p0662 A82-19043

PATTERSON, D. L.
Zone loading of flight-vehicle structures
p0334 A82-29838

PAPULA, E. R.
Effects of moisture on the mechanical properties of glass/epoxy composites
p0329 A82-29036

PAP, G. L.
Conductive prepregs for lightning strike protection on aircraft
p0170 A82-20523

PAUL, B. R.
A ballistic design model for initiators for aircraft personnel escape systems
p0080 A82-14908

PAUL, J.
Influence of casing treatment on the operating range of axial compressors
[AFRA PAPER 82-02-103] p0429 A82-35380

PAVLOVICH, F. M.
Propeller flow visualization techniques
p0597 A82-32672

PAULSON, J. M.
Wind-tunnel investigation of the powered low-speed longitudinal aerodynamics of the vectored-engine-over (VEO) wing fighter configuration
[NASA-TM-83-5263] p0349 A82-22207

PAULSON, J. M.
Thrust-induced effects on low-speed aerodynamics of fighter aircraft
[AFRA PAPER 81-2612] p0155 A82-19203

Low-speed aerodynamic performance of a high-aspect-ratio supercritical wing transport model equipped with full-span slat and part-span
double-slotted flaps ([NASA-TP-1500]) p0139 862-15015
Thrust-induced effects on low-speed aerodynamics of fighter aircraft ([NASA-TR-82327]) p0405 862-25218
PAUSCH, M. J. Flight tests for the assessment of tank performance and control activity p0365 862-23213
PAVEL, A. L. Laser pointing in a turbulent atmosphere p0568 862-42807
PAVLEKO, A. J. Labyrinth seal effects on rotor bearing system stability ([AB-116784]) p0599 862-32742
PAVLICK, R. J. O'Steen International Airport - Impervious to proposed state efforts to limit airport noise p0496 862-40052
PAVLIE, T. A. Testing of the SU-5a ejection seat for the PA-18 /NIBM/ aircraft p0078 862-14955
PAVLOV, V. A. Experimental study of ramsonn-ramthrough vibrations p0015 862-11471
- Analysis of a multihinged ramsonn with allowance for shear strain p0333 862-29834
- Solution of creep problems by a finite element method p0386 862-34172
PAVLOVA, T. A. One reason for the onset of high-frequency self-excited oscillations p0046 862-11448
PAVER, P. M. An experimental investigation of the influence of vertical wind shear on the aerodynamic characteristics of an airfoil ([AIAA PAPER 82-0214]) p0117 862-17843
PAVITCH, G. C. CFD technology for propulsion installation design - Forecast for the 80's ([AIAA PAPER 82-GT-21]) p0420 862-35289
PBAS, J. I. Current status of inlet flow prediction methods ([AD-111784]) p0455 862-26311
PRASCH, L. L. Real-time simulation of helicopter IFP approaches into major terminal areas using RHAY, HLS, and CDII ([AIAA PAPER 82-0260]) p0116 862-17868
PRASCH, L. L., JR. NASA/FAA helicopter AFC simulation investigation of RHAY/HLS instrument approaches p0501 862-40535
PRACOCK, J. L. Qualification of equipment for gunfire induced vibration p0343 862-22158
PRACOCK, R. E. The excitation of compressor/duct systems p0327 862-28993
- Blade tip gap effects in turbomachines: A review ([AD-111892]) p0455 862-26308
PRAGHE, D. L. Three-dimensional separation and reattachment ([NASA-TP-04221]) p0393 862-24167
PRANCE, W. E. Progress at Douglas on laser flow control applied to commercial transport aircraft p0511 862-40958
PRASSEL, L. L. Final regulatory evaluation: Metropolitan Washington Airports Policy ([AD-111059]) p0457 862-26324
- Airfield and airspace capacity/delay policy analysis ([AD-111077]) p0456 862-26326
PRASOR, C. F. An effective algorithms for shock-free wing design ([AD-1116265]) p0569 862-31322
PRASOR, D. S. The testing and approval of aircraft engine mounted accessories ([PHR-90051]) p0318 862-21206
PRASOR, J. S. STOL aircraft structural vibration prediction from acoustic excitation p0345 862-22169
PEARS, K. Community sensitivity to changes in aircraft noise exposure ([NASA-CR-3490]) p0194 862-16807
PEAT, A. W. Thermal decomposition of aviation fuel ([NASA PAPER 82-GT-27]) p0420 862-35292
PEAVY, C. G. Applied computational transsonics - Capabilities and limitations p0432 862-35566
PECKHAM, J. R. New developments in cockpit-human interfaces ([AB-116594]) p0255 862-10215
PECKOVICEK, J. M. An approach to robust nonlinear control design p0045 862-13120
PEDIAS, G. D. Design and fabrication of cored composite hat-stiffened panels p0513 862-40970
PEDDRE, E. D. A look inside the Langley 16-foot transonic tunnel: User's guide ([NASA-TR-63886]) p0089 862-12085
PEDDRE, E. D. Advanced fuel flowmeter for future naval aircraft ([AD-1104364]) p0037 862-11663
PEDRO, D. D. Fairness management and rehabilitation of portland cement concrete pavements ([PE82-13184]) p0357 862-22392
PEOTTI, J. Evaluation of aircraft in simulated combat: Computer against computer or computer against human pilot p0348 862-22202
PEHL, C. J. The application of improved aluminum alloys and stress in aircraft structures p0004 862-10305
PEHLE, R. D. USAF Summer Faculty Research Program, Volume 1: 1981 research reports ([AE-AI13708]) p0615 862-34340
- USAF Summer Faculty Research Program, Volume 2: 1981 research reports ([AE-AI13709]) p0615 862-34341
PHELPS, T. G. Chief of Naval Air Training automated management information system (CANTIS) users guide ([AC-1115852]) p0603 862-33280
PELOSI, G. Analysis and tolerance study of an array antenna for a new generation of secondary radars p0163 862-19521
PELOSHET, R. P., JR. F-16 active flutter suppression program p0044 862-37947
PELSON, D. D. Gyro systems (selected pages) ([AD-1113748]) p0467 862-27271
PESSNOTH, G. C. JR. Effect of nozzle and vertical-tail variables on the performance of a 3-surface F-15 model at transonic Mach numbers ([NASA-TP-2043]) p0586 862-32320
PEWLEY, K. L. Airport noise p0564 862-31071
PENG, S. T. J. Theoretical behavior of progressively sheet-thickening solutions p0013 862-11177
PENNITT, G. The Global Positioning System Evaluator p0181 862-21588
PENNISI, P. J. Improved plasma sprayed HCrill coatings for aircraft gas turbine applications p0176 862-20742
PEOPLES, P. L. Handling air freight in the 1980s - Meeting the challenge p0333 862-29900
PERA, R. Atmospheric electricity hazards analytical model
PERSONAL AUTHOR INDEX

PETITPAURO, R. B.
B/A/CC effects of commercial off-the-shelf equipment
[AD-A116922] p0585 A82-24181

PETIT, J. B., Wr.
Chem-Braze adherable seal attachment to aircraft gas turbine compressor components
[AD-A110777] p0412 A82-25521

PETROV, A. S.
Structural strength of materials and parts of gas turbine engines
[AD-A110968] p0584 A82-42663

PFERD, L.
CPC drive shaft and CPC coupling for the tail rotor of the BO 105
[AD-A110522] p0439 A82-37766

PFERD, H.
Airfield and airspace capacity/delay policy analysis
[AD-A110777] p0458 A82-26326

PFERD, D. E.
Experimental and theoretical studies of three-dimensional turbulent boundary layers on an empennage of a typical transport airplane
[AD-A110095] p0514 A82-40955

Analysis of jet transport wings with deflected control surfaces by using a combination of 2- and 3-D methods
[AD-A110122] p0517 A82-41022

PFELDG, D. R.
Notebook on electromagnetic properties of composite materials below 1 GHz
[AD-A110512] p0559 A82-30340

PHRDIN, J. J.
An investigation of automatic guidance concepts to steer a TOL aircraft to a small aviation facility at low speed
[AD-A110527] p0491 A82-21607

PHEERY, L.
Little people: problem /8A-2 torso harness/
[AD-A110522] p0570 A82-14958

PHEARY, L. R.
In-service inspection methods for graphite-epoxy structures on commercial transport aircraft
[AD-CR-165764] p0089 A82-12142

PHEARY, D. J.
Helicopter rotor performance improvement by utilization of swept-back parabolic blade tip
[AD-A110527] p0576 A82-26298

An examination of helicopter blade profiles and tips
[OMEHA, TP NO. 1982-35] p0548 A82-42811

Helicopter rotor performance improvement by utilization of swept-back parabolic blade tip
[AD-A110512] p0343 A82-22151

PHEARY, C. A.
Evaluation of the design, construction and operation of a gas fueled engine driven heat pump
[AD-A110527] p0213 A82-17859

PHEARY, C. A.
Determination of wind tunnel constraint effects by a unified pressure signature method. Part 1: Applications to winged configurations
[AD-CR-166186] p0367 A82-23224

Determination of wind tunnel constraint effects by a unified pressure signature method. Part 2: Application to jet-in-crossflow
[AD-CR-166187] p0367 A82-23235

PHEARY, C. A.
Marine Air Traffic Control and Landing System (NATCALS Investigation), volume 1
[AD-A110862] p0396 A82-29188

Marine Air Traffic Control and Landing System
[AD-A110062] p0396 A82-29188

Marine Air Traffic Control and Landing System
[AD-A110863] p0396 A82-29189

Marine Air Traffic Control and Landing System (NATCALS) Investigation
[AD-A110777] p0466 A82-27260

PHEARY, C. A.
The Model 612 multi-bladed rotor system
[AD-A110527] p0277 A82-26376

PHEARY, C. A.
Some design considerations for solar-powered aircraft
[AD-TP-1675] p0589 A82-32350

PHEARY, D. D.
SLS performance assessment, tank 4. Volume 1: Evaluation procedures and equipment design
[AD-A105393] p0087 A82-12061

PILES, W.
The helicopter in rescue operations in high-mountain areas
[AD-A110527] p0153 A82-19019

PILES, E.
Application of structural optimization technique to reduce the external vibrations of a gas-turbine engine
[AD-CR-165764] p0312 A82-21156

PILES, E.
Application of optimal control techniques to aircraft flutter suppression and load alleviation
[AD-110512] p0304 A82-30173

PILES, E., R. R., III
Preliminary airworthiness evaluation of the UH-1 with hot metal plus plume infrared suppressor and infrared sensor
[AD-A110213] p0314 A82-21177

PILES, E.
The influence of protective treatment on the mechanical properties of superalloy parts
[AD-A110213] p0346 A82-22180

PILES, E.
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[AD-A110777] p0208 A82-26620

Evaluation of an asymptotic method for helicopter rotor airloads
[AD-A110527] p0498 A82-40569

Helicopter rotor loads using a matched asymptotic expansion technique
[NASA-CR-165764] p0312 A82-21156

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[NASA-CR-165913] p0523 A82-28282

Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[NASA-CR-3619] p0613 A82-33734

PILES, E.
The influence of turbulence effects on average velocity measurements made using five hole spherical pitot tube probes
[AD-A110527] p0470 A82-27250

PIERREPONT, D.
Towards minimum power for environmental control in transport aircraft
[AD-A110527] p0111 A82-10992

PIERSON, M. G.
Analytical prediction of aerospace vehicle vibration environments
[AD-CR-165764] p0160 A82-19305

PIERSE, L.
Laser Doppler anemometry applied to the study of the airflow in the wake of an helicopter rotor
[OMEHA, TP NO. 1982-61] p0552 A82-43755

PIERSE, W. D.
Structural modification to achieve antiresonance in helicopters
[AD-A110527] p0379 A82-32849

Analysis of casein systems with applications to helicopter vibration control problems
[AD-A110527] p0526 A82-28301

PILLA, G. J.
Titanium surface treatments for adhesive bonding
[AD-A110062] p0560 A82-30378

PILLAI, S.
Primary sewage treatment plant as a source of bird hazards at airport
[AD-A110062] p0382 A82-33523

Primary sewage treatment plant as a source of bird hazards at airport
[AD-A110062] p0413 A82-26184

PIRROTTA, G. P.
Damage of turbine blades due to interaction with fuel recombination products
[AD-A110527] p0127 A82-18479

PIERSE, L.
The design, construction, and performance of composite fuselage components for the Boeing 734 helicopter
[AD-A110527] p0292 A82-27424

PIERS, S.
An influence coefficient method for the application of the nodal technique to wing flutter suppression of the DAST ABW-1 wing
POLICELLA, H. A method for predicting the lifetime of gas turbine blades p0106 A82-16692

POLE, K. J. The Link-Rides driver training simulator for tracked vehicles: The effect of method and duration of training on the transfer of training (12P-1980-28) p0257 A82-18226

POLLAAR, D. A. Packaging the VSCF system for an aircraft engine environment p0233 A82-29383

POLLAAR, D. V. Flight attendant injuries: 1971-1976 p0531 A82-29274

POLLAAR, J. S. Preliminary thoughts on helicopter cabin noise prediction methods p0248 A82-18148

POLLOCK, B. Self streamlining wind tunnels without computers p0275 A82-26181

A numerical investigation of two-dimensional, subsonic, incompressible, wind tunnel interference theory [AIAA-900-NOE-003] p0364 A82-23197
Design basis for a new transonic wind tunnel [AD-111766] p0606 A82-33369

POLOYEV, A. V. The effect of a weak shock wave on a wing of complex planform at supersonic velocities p0581 A82-46132

POLLS, G. Separated flow around helicopter bodies p0250 A82-18163
On the calculation of separated flow on helicopter fuselages [B88-02-321-81-0] p0252 A82-18188
Program presentation of the working group separated flow: Problems with rotary wings [B88-02-361-81-0] p0406 A82-25234


PORTNER, M. J. Determination of lowess in a channel with a sudden expansion behind a diffuser p0282 A82-26492

PORTIKAIOLO, C. Definition of display/control requirements for Cessna transport aircraft/ adverse weather capability p0385 A82-23217

POLS, A. Practical aspects of instrumentation system installation, Volume 13 p0099 A82-13140

POPE, L. H. Development and validation of preliminary analytical models for aircraft interior noise prediction p0044 A82-38077
Analytical prediction of the anterior noise for cylindrical models of aircraft fuselages for prescribed exterior noise fields. Phase 2: Models for sidewall tris, stiffened structures and cabin acoustics with floor partition [NASA-CH-165669] p0358 A82-22952

POPE, L. E. The need for multivariable design and analysis techniques p0029 A82-10049

POPOLI, L. Development of a tapped random vibration technique for acceptance testing p0345 A82-22171

POPOTEVIII, V. H. Development of a control law for the alleviation of maneuver loads on an elastic aircraft p0388 A82-34140

POPPEL, G. L. Optical tip clearance sensor for aircraft engine controls [AIAA PAPER 82-1131] p0438 A82-37691

POPPOLO, G. A. The effect of a weak shock wave on a wing of complex planform at supersonic velocities p0581 A82-46132

POTEY, S. R. The shape of the air traffic control system of the future - A U.S. perspective p0111 A82-17280
The National Airspace System Plan p0384 A82-33893
Preliory analysis of the benefits and costs to implement the National Airspace System Plan [AD-A117664] p0606 A82-33369

POKER, S. Design of direct digital flight-mode control systems for high-performance aircraft p0074 A82-14829

POPE, B. E. Ejector powered propulsion and high lift subsonic wing p0512 A82-40970

POREY, R. E. The performance of varying systems in avoiding Controlled-Flight-Into-Terrain /CFIT/ accidents p0582 A82-46255

PORTERFIELD, J. L. Advanced technology lightweight gondola system experimental fabrication program [AD-A104157] p0133 A82-14082

PORTER, C. Experimental study of a jet deflector p0362 A82-23173

PORTES, L. Analysis of a multiaxial espionage with allowance for shear strains p0333 A82-29384

PORTSELY, V. L. Numerical study of vibrational relaxation in the turbulent mixing of jets in a supersonic nozzle p0334 A82-29880

PORTMANS, F. L. Process development and evaluation of gas turbine engine components in 181 829 p0318 A82-21205

PORTERS, J. Inverse SAR and its application to aircraft classification p0075 A82-14871

PORT, G. M. Tactical STOL moment balance through innovative configuration technology [AIAA PAPER 81-2615] p0155 A82-19204

POTTIER, D. L. Structural integrity of an adhesively bonded aircraft fuselage p0327 A82-28996

POTTIER, J. Fasteners for composite structures p0496 A82-39929

POTTIER, E. E. Techniques for overhead-vise detection p0106 A82-16560

POUTHAIS, R. J. An X-Ring aircraft control system concept [AIAA 82-1540] p0485 A82-38954

POOTEY, D. H. Direct digital design method for reconfigurable multivariable control laws for the A-7 Dijet II aircraft p0074 A82-14828

POULOS, E., J. Composite fasteners - A compatible joining technique for fiber reinforced composite materials p0289 A82-27159

POUGNET, S. Development of a self-optimizing flexible technology /STOF/ transonic wing wind tunnel model [AIAA 82-0601] p0237 A82-24673

POWEROBO, L. E. Fabrication and test of integrally stiffened graphite/epoxy components p0435 A82-37071

POWELL, C. A. Annoyance caused by propeller airplane flyover noise: Preliminary results [AIAA-TR-83204] p0260 A82-10996
Effects of repetition rate and impulsiveness of simulated helicopter rotor noise on annoyance [NASA-TP-1949] p0269 A82-19707

D-119
POULING, D. C.
Evaluation of the FAA/HITE weather data devices
[AD-114664] p0562 A82-30800

POULIN, E. L.
Design considerations for the direct digital control of dry-tuned gyroscopes
[AD-111087] p0907 A82-26221

POULY, G. B., J.
Maintenance training simulator design and acquisition: ISD-derived training equipment design
[AD-111330] p0046 A82-13240

POUTTELL, J. H.
Light Airborne Multi-Purpose System
[AD-110671] p0907 A82-26221

POURDES, J. E.
A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion
[AD-110806] p0932 A82-11006

PUBER, G.
Efficient optimum design of structures - Program PHOENIX
[AD-A106547] p0497 A82-35402

QINZEN, T.
The automatic matrix force method and techniques for handling more complex computations with given computer capacity
[AD-A105377] p0032 A82-10794

QUIOZEN, C.
An experimental investigation of leading-edge spanwise blowing
[AD-A106547] p0497 A82-35402

QUIOZEN, C.
A simple system for helicopter individual-blade-control and its application to stall alleviation
[AD-A111494] p0632 A82-37765

QIU, B. L.
[AD-A106764] p0513 A82-40988

RADZIEWSKI, E.
Electro-optical vector scoring system
[AD-A110671] p0907 A82-26221

RAEB, R.
German-Argentine experiment: Vertical-rotor wind engine
[AD-A110671] p0907 A82-26221

RAEB, R. C.
Acquisition of F-100/3 high pressure compressor entrance profile
[AD-A106547] p0497 A82-35402

RAIHMELD, M. D.
Experimental evaluation of squeeze flow supported flexible rotors
[AD-A106547] p0497 A82-35402

RAHMA, D. J.
Intake design with particular reference to ice protection and particle separators
[AD-A110671] p0907 A82-26221

RACHIVITSKY, L.
Terrain following/terrain avoidance system concept development
[AD-A106547] p0497 A82-35402

RATCHFORD, E.
Modelling and control of de-wind facility
[AD-A110671] p0907 A82-26221

RACHASMA, E.
A system safety program for aircraft production and deployment
[AD-A110671] p0907 A82-26221

RADDY, J. R., J.
Evaluation of a proposed modified F/BD-111 crew seat and restraint system
[AD-A110671] p0907 A82-26221

RADDY, J. R., J.
Comparative vertical impact testing of the F/BD-111 crew restraint system and a proposed modification
[AD-A110671] p0907 A82-26221
RADONSKI, L. A.

CF9 Jet Engine Diagnostics Program: High pressure compressor clearance investigation

(RASA-CF-168580) p0317 A82-21917

RAPPABA, R. J.
Highlights of a design concept for a close ground support fighter

(AIAA PAPER 82-04111) p0121 A82-17932

RAHMONAN, S.
Wind tunnel tests on airfoils in tandem cascade

(AIAA 82-05853) p0237 A82-24661

RAGDALL, R. A.
Use of Space Shuttle technology in conventional aircraft

(AIAA 81-2176) p0002 A82-10125

RAHANI, R.
Mathematical models for the syntheis and optimization of spiral bevel gear tooth surfaces

(RASA-CJ-3553) p0412 A82-25516

RAHANII, S.

(RASA-CF-165538) p0136 A82-14447

RAHMOPO, G. S.
Slotted wall test section for automotive aerodynamic test facilities

(AIAA 82-05853) p0237 A82-24661

RAJ, C.
Future auto engines - Competition heats up

(AIAA 82-05853) p0476 A82-27561

RAJ, R.
Experimental study of turbulence in blade end wall corner region

(RASA-CF-3553) p0572 A82-31639

RAJAZL, S. M.
An advanced programmable/reconfigurable color graphics display system for crew station technology research

(AIAA 81-2138) p0051 A82-13516

RAJAT, M.
Barriers and dispersions in minimum-time interception

(RASA-82-84241) p0409 A82-25262

RAJASH, R. S.
Closed loop environmental control systems for fighter aircraft

(ASME PAPER 81-ENAS-2) p0011 A82-10890

RAJU, P. N.
Dynamic response of aircraft structure to gun shock loads

(AIAA 82-05853) p0073 A82-11314

RAJEEVA, J. V.
Numerical solution of Space Shuttle Orbiter flow field

(AIAA PAPER 82-00229) p0286 A82-27063

RAJEEV, D. L.
Flight Loads Survey monitoring and analysis techniques

(AIAA PAPER 81-2461) p0057 A82-13903

RAI, S. J.
Blade plans for a quiet helicopter

(AIAA-CF-166256) p0198 A82-17121

RAJENDRA, S. M.
Low-speed aerodynamic characteristics of wings with sweep discontinuities

(AIAA 82-05853) p0385 A82-33997

RAJAN, N. K.
Learfield aerodynamics and optical propagation characteristics of a large-scale turret model

(AD-413510) p0529 A82-28624

RAJAN, S. V.
Experimental study of the effects of secondary air on the emissions and stability of a lean premixed combustor

(AIAA PAPER 82-1072) p0415 A82-34992

RAJEEV, V.
Acoustic control of dilution-air mixing in a gas turbine combustor

(ASME PAPER 82-CP-35) p0421 A82-35296

RAGOS, O. E.
Helicopter design synthesis

(AIAA 82-05853) p0440 A82-27772

RAJAN, V.
Laser application in weapon guidance and active imaging

(AIAA 82-05853) p0433 A82-35767

RAJEEV, T.
Short-term behavior of a Doppler navigation system and comparison with position indication by means of scanning radar

(AIAA 82-05853) p0390 A82-34672

RAJEEV, J. R.
The inter-relation between design, construction and maintenance

(AIAA 82-05853) p0224 A82-24010

RANDALL, C. C.
Turbotrop cargo aircraft systems study

(RASA-CF-165813) p0109 A82-16070

RANDALL, T. M.
Color graphics based real-time telemetry processing system

(AIAA 82-05853) p0179 A82-20771

RANDOLPH, H. S.
Concept demonstration of automatic subsystem parameter monitoring

(AIAA 82-05853) p0500 A82-90530

RAND, R. B.
Controlling the software/hardware interface for the validation of avionics systems

(AIAA 82-05853) p0002 A82-10116

Integrated control design techniques

(AD-4108223) p0257 A82-18224

RANGABA, P.
Dynamic response of aircraft structure to gun shock loads

(AIAA 82-05853) p0013 A82-11314

RANGABHA, H. S.
Automatic handoff of multiple targets

(AD-1017460) p0476 A82-27561

RANKS, R. F.
Offshore uses of the aircraft

(AIAA 82-05853) p0173 A82-20553

RAO, N. B.
Flows over wings with leading-edge vortex separation

(RASA-CF-165858) p0448 A82-26238

RCAO, N. M.
Allocation of the subsonic pitch-up of delta wings

(AIAA PAPER 82-0129) p0183 A82-22052

Upper Vortex Flap - A versatile surface for highly swept wings

(AIAA 82-05853) p0515 A82-14022

Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices (data report)

(RASA-CF-165806) p0193 A82-15014

Leading edge flap system for aircraft control augmentation

(RASA-CASE-LAB-12797-1) p0407 A82-25240

Highed stroke aircraft control system

(RASA-CASE-LAB-12806-1) p0451 A82-26278

RAO, J. S.
Optimum journal bearing parameters for minimum rotor unbalance response in synchronous whirl

(ASME PAPER 81-DEP-55) p0161 A82-19314

RAO, E. M.
Precalhoo estimates of near Earth satellite lifetimes using quasi-dynamic atmopheric models - application to a proposed Brazilian satellite

(ASPE-2325-PE/080) p0530 A82-29347

RAO, S. R.
Automated optimum design of wing structures. Deterministic and probabilistic approaches

(RASA-82-04755) p0535 A82-29317

RAPP, R. L.
The F704 development program - A new approach

(AIAA PAPER 82-11680) p0417 A82-35045

RAPP, R. L.
The Earth's gravity field to degree and order 180 using SEASAT altimeter data, terrestrial gravity data and other data

(AD-1413098) p0478 A82-27900

RASCHE, M. G.
Proceedings of the 1st Annual Workshop on Aviation Related Electricity Hazards Associated with Atmospheric Phenomena and Aircraft Generated Inputs

(AD-4107346) p0464 A82-27237

A compendium of lightning effects on future aircraft electronic systems

(AD-411417) p0525 A82-28293

BASCHE, M.
Automation of flight operational control in the German Democratic Republic

(AIAA 82-05853) p0547 A82-42574

RASMOSEK, P.
Aerodynamic forces acting on the blades of stall regulated propeller type windmills

(AIAA 82-05853) p0573 A82-31718

B-122
Composite use on helicopters

A review of Reynolds number studies conducted in the Langley 0.3-m Transonic Cryogenic Tunnel

[AIAA Paper 82-0234]

The vortex flow field generated by a hovering helicopter

[AIAA Paper 82-18758]

Recent sidewall boundary-layer investigations with suction in the Langley 0.3-m Transonic Cryogenic Tunnel

[AIAA Paper 82-0234]

Secondary radar for airborne collision avoidance

[ARIA Paper A-108182]

[p0258 482-18464]

[AD-116150]

[p0386 482-34007]

Composite use on helicopters

[AD-A116150]

[p0242 482-25213]

Secondary radar for airborne collision avoidance

[p0317 A82-33156]

[p0219 A82-19519]

[p0281 A82-25336]

[p0292 A82-26335]

[p0289 A82-27154]

[p0273 A82-25773]

[p0324 A82-29439]

[p0276 A82-26227]

[p0334 A82-33627]

[p0334 A82-33627]

[p0276 A82-26227]

[p0289 A82-27154]

[p0349 A82-22066]

[p0317 A82-33156]

[p0242 A82-19519]

[p0219 A82-19519]

[p0281 A82-25336]

[p0292 A82-26335]

[p0289 A82-27154]

[p0317 A82-33156]

[p0242 A82-19519]

[p0219 A82-19519]

[p0281 A82-25336]

[p0292 A82-26335]

[p0289 A82-27154]

[p0317 A82-33156]

[p0242 A82-19519]

[p0219 A82-19519]

[p0281 A82-25336]

[p0292 A82-26335]

[p0289 A82-27154]

[p0317 A82-33156]

[p0242 A82-19519]

[p0219 A82-19519]

[p0281 A82-25336]

[p0292 A82-26335]

[p0289 A82-27154]

[p0317 A82-33156]

[p0242 A82-19519]

[p0219 A82-19519]

[p0281 A82-25336]

[p0292 A82-26335]

[p0289 A82-27154]

[p0317 A82-33156]

[p0242 A82-19519]

[p0219 A82-19519]
BENJAMIN, J. P.
Review of support interference in dynamic tests
[AIAA 82-0594] p0237 A82-24668
Analytic extrapolation to full scale aircraft
dynamics
[AIAA PAPER 82-1367] p0490 A82-39143
BEND, R. E.
Parachute technology under pressure
p0024 A82-12804
BEND, D. L.
EAGLE - An interactive engine/airframe life cycle
cost model
[AIAA PAPER 82-GT-56] p0422 A82-35311
BEND, R. L.
Stability of boundary layers with porous suction
stripes: Experiment and theory
p0301 B82-20152
BEND, L. E.
Voice Interactive Systems Technology Overview
[VISIA] p0608 B82-33383
BEND, M.
The national dynamics ‘observer’ mini-BPV for
tropical operation
p0493 A82-39734
BEND, R. M.
Skin sensing guidance system for high altitude
aircraft
[NASA-CASE-PAC-11052-1] p0367 B82-23231
BEND, T. M.
Correlation of Preston-tube data with laminar skin
friction (Log No. J12984)
[NASA-TN-D-4027] p0539 B82-29556
BEND, W. L., XII
Aeroelasticity systems - Some reflections on two
decades of testing in the NASA Langley Transonic
Dynamics Tunnel
p0661 A82-12969
Aeroelasticity systems: Some reflections on two
decades of testing in the NASA Langley transonic
dynamics tunnel
p0085 B82-12041
Decoupler pylon: wing/store flutter suppressor
[NASA-CASE-LAB-12466-1] p0592 B82-32373
BEND, S. E.
Evaluation of a selected group of anti-exposure
garment configurations for their effects on the
operational performance and survival of Naval
aircrews
p0079 B82-14972
BIGLIE, K.
Airbus Industrie - The year of progress
p0160 A82-21189
BIGGER, R. E.
Collection and simulation of spatial infrared
signatures of military jet aircraft
[AIAA PAPER 81-2094] p0056 A82-13921
BENHARAD, U.
A terrain following system, an algorithm and a
sensor
p0949 A82-39740
BENHATIF, L. M.
Continuous film/advanced composite isogrid - A
promising structural concept
p0280 B82-27138
BENHAHIM, J. T.
Cockpit display of traffic information and the
measurement of pilot workload: An annotated
bibliography
[AD-A113487] p070 B82-27291
BIECHT, G.
Survey of active and passive means to reduce
rotocraft vibrations
p0444 A82-37946
Helicopter vibration control: A survey
[B82-01-302-80-0] p0316 B82-21185
A helicopter tail rotor of fiber composite
construction and vibration isolation systems
[ARIS+AVIS] for helicopters
[B82-01-301-80-0E] p0316 B82-21187
BIEB, C.
Management of powerplant maintenance and
restoration programs for fuel conservation
[SAR PAPER 811052] p0231 A82-24394
BIEB, D. B.
Simulation study of a hybrid strapdown attitude
and heading reference system
p0022 B82-12641
Integration of multi-sensor navigation data using
optimal estimation techniques
p0273 A82-25577
BIEB, J. L.
Design aspects of son rigid airship envelopes
p0005 A82-10306
BIEB, L.
Performance of single-stage axial-flow transonic
compressor with rotor and stator aspect ratios of
1.63 and 1.78, respectively, and with design
pressure ratio of 1.82
[NASA-TP-1970] p0449 B82-19222
Performance of single-stage axial-flow transonic
compressor with rotor and stator aspect ratios of
1.63 and 1.77, respectively, and with design
pressure ratio of 2.05
[NASA-TP-2001] p0355 B82-22269
BIEB, L. D.
SLV aircraft response to turbulence generated by
tall upwind building
p0433 A82-35621
BIEB, C. E.
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 1: Preliminary
process analyses
[AD-A112661] p0527 B82-28462
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 2: Process
variable analyses and laboratory sample
production
[AD-A112662] p0528 B82-28463
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil. Part 3: Production
of specification of JP-4 fuel from geokinetische
shale oil
[AD-A112663] p0528 B82-28464
An exploratory research and development program
leading to specifications for aviation turbine
fuel from whole crude shale oil, part 5
[AD-A114128] p0612 B82-33551
BIEB, G. C.
Silicon liquid crystal light valve for flight
simulation applications
[AD-A110928] p0413 B82-26005
BIEB, S. M.
Black Hawk rotor de-icing
p0280 A82-26398
BIEB, R. L.
New advances in signal processing technology for
integrated CHI avionics
p0070 A82-14762
Enhanced noise immunity and error control in a
fully integrated JTIDS/GPS receiver
[AD-A118171] p0125 B82-21871
The influence of technology advances on integrated
CHI avionics
[AD-A106052] p0176 B82-20672
Modular multi-Function Multi-Band Airborne Radio
System (RFABS). Volume 2: Detailed report
[AD-A104324] p0136 B82-14424
BIEB, H. M.
A retirement-for-cause study of an engine vibration
disk
[AD-A107924] p0305 B82-20184
BIEB, F.
Integrated cockpit for A-129
p0366 B82-23225
BIEB, D.
Advanced technologies applied to reduce the
operating costs of small commuter transport
aircraft
p0508 A82-40915
BIEB, H. M.
Computer flight planning for fuel efficiency
[AD-A112730] p0112 B82-17289
BIEB, J. J.
Selected bibliography of NASA/NASA aircraft icing
publications
[NASA-TN-81651] p0035 B82-11053
Aircraft icing research at NASA
[NASA-TN-82919] p0558 B82-30297
BIEB, J.
Fitts' principles still applicable - Computer
monitoring of fighter aircraft emergencies
p0061 A82-46254

References
corrections for three-dimensional models
[AI6A 82-0598] p0237 882-24663
Wind-tunnel wall interference corrections for three-dimensional flows
[AI6A 82-03252] p0379 882-32847
Higher-order flow angle corrections for three-dimensional wind tunnel wall interference
[AI6A 82-0066] p0555 882-44246
IKK, H. S. A. S.
Prediction and performance of radome-covered reflector antennas
p0080 882-15311
IKK, H. E.
Influence of airblast atomizer design features on mean drop size
[AI6A PAPER 82-1073] p0416 882-34993
IKLEE, D. P.
Numerical solution of three-dimensional unsteady transonic flow over wings including laminar/turbulent interactions
[AI6A PAPER 82-0352] p0164 882-19797
Nonlinear transonic flutter analysis
[AI6A PAPER 80-0666] p0583 882-48647
ISL, A.
Damped Euler-equation method to compute transonic flow around wing-body combinations
p0553 882-44092
JACK, R.
Drop formation in hydrocarbon fuels
[ASME PAPER 82-GT-09] p0422 882-35307
JBB, J. B.
The direct effects of lighting on aircraft
p0432 882-35730
Atmospheric electricity hazards analytical model development and application. Volume 2: Simulation of the lighting/aircraft interaction event
[AD-A116016] p0580 882-29801
ORFERT, C.
An intermediate solution between basic and expanded aircraft integrated data systems (AIDS)
[AD-857772] p0402 882-25182
ORFERT, J. F.
Aging for thickness effects in the calculation of subcritical unsteady aerodynamic forces: Application to wing-fuselage interactions
[SAAS-821-111-106] p0394 882-26183
Application of small propellers to RPV propulsion
p0493 882-39737
ORFERT, C. J.
Noses for courses in RPV operations
p0493 882-39729
ORFERT, D. W.
Prediction of subsonic aircraft flows with jet exhaust interactions
p0097 882-13096
ORFERT, D. O.
Performance assessment of the ACES-II ejection seat and configuration
p0080 882-14980
ORFERT, P. L.
Pavement management and rehabilitation of portland cement concrete pavements
[9822-131304] p0357 882-22392
ORFERT, L.
V/STOL aircraft and fluid dynamics
[SAAS-78-0128] p0026 882-10029
V/STOL aircraft and fluid dynamic
p0362 882-23179
Recent progress in VSTOL technology
[SAAS-78-04238] p0603 882-33334
ORFERT, R. L.
Airfoil cooling returns to targets
[SAAS PAPER 81-BNAS-6] p0011 882-10856
ORFERTON, J. B.
Experimental evaluation of a perspective tunnel display for three-dimensional helicopter approaches
p0083 882-15847
ORFERTON, R.
[AD-A106052] p0136 882-14424
OGEFETTE, J. S.
Steady wind tunnel reference systems performance analysis
p0066 882-16682
ROBISON, C.
Air modeling for helicopter simulation of low speed, low altitude and steeply descending flight
[NASA CR-166385] p0592 882-32374
ROBISON, C. W.
Aircraft digital input controlled hydraulic actuation and control system
[AD-109026] p0038 882-11072
ROBISON, G. R.
Aircraft cabin air ozone contamination and compliance with regulations
p0342 882-31057
ROBISON, L. B.
Aluminum and its alloys - Weldability
p0222 882-23755
ROBISON, J. C.
Structural modeling of high Reynolds number wind tunnel models
[AI6A 82-0602] p0238 882-24670
ROBISON, L. R.
Executive summary of systems analysis to develop future civil aircraft noise reduction alternatives
p0602 882-33162
ROBISON, L. M.
Portability of EXELOG alloy 8536 - An oxide dispersion strengthened sheet alloy
p0385 882-33994
ROBISON, B. L.
Fuselage structure using advanced technology fiber reinforced composites
ROBISON, B. S.
Design for operability of military aircraft RPV engineering experience and requirements. I - Thoughts of a squadron engineer
p0179 882-20561
ROBERTS, J. S.
Control electronics for air-borne quadrupole ion mass spectrometer
[AD-1151399] p0560 882-30356
ROCK, G.
Elastic suspension of a wind tunnel test section
p0370 882-23363
ROCK, S. R.
Evaluation of a multivariable control design on a variable cycle engine simulation
[AI6A PAPER 82-1077] p0436 882-37682
Development of multivariable controllers for aircraft turbine engines
p0404 882-11087
RODDON, M. F.
Sensor failure detection system
[AI6A-CN-165515] p0100 882-13145
RODDON, M. L.
Measures to increase airfield capacity by changing aircraft runway occupancy characteristics
[AI6A-CN-168841] p0351 882-22240
ROCKS, J. E.
A Microwave Ice Accretion Measurement Instrument - MIAMI
[AI6A PAPER 82-0285] p0116 882-17075
RODENSH, P. N.
Ceramic applications in turbine engines
[AI6A-CN-165197] p0565 882-31158
RODENT, R. W.
Aerodynamic lag functions, divergence, and the British flutter method
p0433 882-35620
RODER, R.
Automatic controlled terrain following flights
p0150 882-18920
ROBINS, C. L.
Prediction of cyclic growth of cracks and debonds in aluminum sheets reinforced with boron/epoxy
p0286 882-27151
ROBINS, C.
A new APF for medium place aircraft environmental control systems
[ASME PAPER 81-BNAS-1] p0310 882-10889
The performance of centrifugal compressor channel diffusers
[ASME PAPER 82-GT-10] p0420 882-35279
ROBINS, J.
Airfield and airspace capacity/delay policy analysis
p0458 882-26326
ROBINECE, C. M.
Hydromechanical interactions with surface mass transfer. I - Steady flow over a slender wedge wing
[AI6A PAPER 82-0579] p0374 882-31944
BOSSHUER, D. A.  
- Design considerations of DC-Link aircraft generation systems  
p0229 A82-24377

BOSS, B. F.  
- A review of U.S. Air Force research related to airframe and engine materials  
p0329 A82-29268

BOSS, B.  
- Investigation of a rotor system incorporating a constant lift tip  
[NASA-CE-166261] p0531 B82-29271

BOSS, T. J.  
- Aerodynamics at the 1981 La Bourget show  
p0332 A82-29789

BOSS, J.  
- Partials jets  
p0552 B82-40359

BOSS, T.  
- Satellite geometry considerations for low cost GPS user equipment  
p0021 A82-12630

BOSS, C.  
- A practical approach to the incorporation of technical advances in avionics  
p0504 A82-40866

BOSS, P. J.  
- Evaluation of fuel injection configurations to control carbon and soot formation in small GT combustors  
[AIAA PAPER 82-1175] p0417 A82-35041

BOSS, S. P.  
- Investigation of soot and carbon formation in small gas turbine combustors  
[NASA-CE-167853] p0354 B82-22267

BOSS, J.  
- Development of a simple, self-contained flight test data acquisition system  
p0777 A82-20756

BOSS, S.  
- The use of differential pressure feedback in an automatic flight control system  
[AIAA 82-1596] p0405 B82-38981

BOSS, S. A.  
- A simple, low-cost application of a flight test parameter identification system  
[AIAA PAPER 82-1312] p0487 A82-38939

BOSS, S.  
- A program to evaluate a control system based on feedback of aerodynamic pressure differentials  
[NASA-CE-162486] p0391 B82-16069

BOSS, J.  
- Development of a simple, self-contained flight test data acquisition system  
[NASA-CE-166912] p0359 B82-23245

BOSS, J. L.  
- A research program to reduce interior noise in general aviation airplanes. Influence of depepuration and damping materials on the noise reduction characteristics of flat and curved stiffened panels  
[NASA-CE-169035] p0462 B82-27088

ROBISHAW, J. R.  
- Analysis and preparation of a digital terrain data base for flight simulator use  
[AD-115597] p0559 B82-30315

ROBISHAW, R.  
- An electronic control for an electrodynamic active control landing gear for the F-4 aircraft  
[NASA-CE-3552] p0353 B82-22252

ROBISHAW, D. L.  
- Investigation of passive shock wave-boundary layer control for transonic airfoil drag reduction  
[NASA-CE-168084] p0349 B82-22209

ROBISHAW, L. J.  
- Some EAR research on shielded and unshielded fuselage mounted air intakes at subsonic and supersonic speeds  
p0093 B82-12068

ROBISHAW, B.  
- Analysis of an airplane windshield anti-icing system  
[AIAA PAPER 82-1372] p0409 B82-19134

ROBISHAW, R.  
- icing analysis of an unprotected aircraft radome  
[AIAA PAPER 82-0281] p0118 B82-18774

ROBISHAW, R.  
- Thermodynamic performance of an airplane wing leading edge anti-icing system  
[AIAA PAPER 82-0851] p0373 B82-21071

ROBISHAW, L.  
- Naval Air Systems Command /NVAIR/ ATE program - Standardized ATE for the carrier environment  
p0294 A82-27092

ROBISHAW, C. O.  
- Radiometric measurements at 80 GHz  
p0151 A82-18943

ROBISHAW, R. F.  
- Design characteristics of helicopter rotor blades for optimum dynamic characteristics  
[NASA-CE-165352] p0607 B82-33374

BOBISH, J.  
- The use of differential pressure feedback in an automatic flight control system  
[AIAA PAPER 82-17874] p0393 A82-24201

BOBISH, J.  
- A practical approach to the incorporation of technical advances in avionics  
p0504 A82-40866

BOBISH, P. A.  
- A simple, low-cost application of a flight test parameter identification system  
[AIAA PAPER 82-1312] p0487 A82-38939

BOBISH, S. P.  
- Investigation of soot and carbon formation in small gas turbine combustors  
[NASA-CE-167853] p0354 B82-22267

BOBISH, T.  
- Development of a simple, self-contained flight test data acquisition system  
[NASA-CE-166912] p0359 B82-23245

BOBISH, J. L.  
- A research program to reduce interior noise in general aviation airplanes. Influence of depepuration and damping materials on the noise reduction characteristics of flat and curved stiffened panels  
[NASA-CE-169035] p0462 B82-27088

BOBISH, J.  
- Analysis and preparation of a digital terrain data base for flight simulator use  
[AD-115597] p0559 B82-30315

BOBISH, R.  
- An electronic control for an electrodynamic active control landing gear for the F-4 aircraft  
[NASA-CE-3552] p0353 B82-22252

BOBISH, D. L.  
- Investigation of passive shock wave-boundary layer control for transonic airfoil drag reduction  
[NASA-CE-168084] p0349 B82-22209

BOBISH, L. J.  
- Some EAR research on shielded and unshielded fuselage mounted air intakes at subsonic and supersonic speeds  
p0093 B82-12068

BOBISH, B.  
- Analysis of an airplane windshield anti-icing system  
[AIAA PAPER 82-1372] p0409 B82-19134

BOBISH, R.  
- icing analysis of an unprotected aircraft radome  
[AIAA PAPER 82-0281] p0118 B82-18774

BOBISH, R.  
- Thermodynamic performance of an airplane wing leading edge anti-icing system  
[AIAA PAPER 82-0851] p0373 B82-21071

BOBISH, L.  
- Naval Air Systems Command /NVAIR/ ATE program - Standardized ATE for the carrier environment  
p0294 A82-27092

BOBISH, C. O.  
- Radiometric measurements at 80 GHz  
p0151 A82-18943

BOBISH, R. F.  
- Design characteristics of helicopter rotor blades for optimum dynamic characteristics  
[NASA-CE-165352] p0607 B82-33374
SAHBOU, B.

Stability of boundary layers with porous suction strips: Experiment and theory
p0031 N82-20152

SAKAI, S.


SABGEB. D. J.

Future technology and requirements for helicopter engines
p0207 N82-17207

SABGEB. D. L.

Evaluation of optimum journal bearing parameters for minimum wear
p0079 A82-14972

SAFEB, A.

Evaluation of an automatic subsystem parameter monitor
p0502 A82-40552

SAIDBBS01, K. C.

Effect of impeller extended shrouds on centrifugal compressor performance as a function of specific speed
p0428 A82-35411

SAIDBBS, C. D.

Future technology and requirements for helicopter engines
p0172 A82-20544

SAIDBBSO1, R. D.

Stability of boundary layers with porous suction strips: Experiment and theory
p0031 N82-20152

SAHATOS, L.

Disengagement of safety harness buckles - C74
p0263 N82-19199

SAHATOS, L.

Disengagement of safety harness buckles - C74
p0263 N82-19199

SAHATOS, L.

A comparison of properties of single overlap tension joints prepared by ultrasonic welding and other means [AIAA 82-0661] p0335 A82-30091

SAHERAKHER, L.

Leaky wave antenna using an inverted strip dielectric waveguide
p0163 A82-19552

SAIIV, J.

On computing Flouquet transition matrices of rotorcraft
p0013 A82-11221

SABEBAH, E. V.

Automatic handoff of multiple targets
p0074 A82-2756

SABEBAH, E. V.


SABEBAH, E. V.

Design, fabrication and qualification of the T-2 composite rudder
p0495 A82-39891

SABEBAH, E. V.

Development of high loading, high efficiency axial flow turbine
p0583 A82-4706

SAHATOS, L.

Effects of wing-leading-edge modifications on a full-scale, low-wing general aviation airplane: Wind-tunnel investigation of
Theoretical investigation of the influence of pressure distributions on three different concerns in the calculation of the aerodynamic reliability model for planetary gear.

An accurate Doppler navigator with microwave simplicity.

Fuel-rich plume combustion.

An investigation of rotor harmonic noise by the use of small scale wind tunnel models.

An accurate Doppler navigator with microwave simplicity.

High technology raises fighter force readiness.

The outlook for advanced transport aircraft.

Fatigue behavior of welded joints.

National Transonic Facility (NTF) prototype fan blade fatigue test.

Calculation of the stability and post-buckling behavior of thin shell underframes using the finite element method.

Acceptance testing of the Calspan variable stability Learjet.

Calculation of the stability and post-buckling behavior of thin shell underframes using the finite element method.

Configuration management techniques for automatic testing.

Development of hybrid gas turbine bucket technology.

Investigation of the structural degradation and personnel hazards resulting from helicopter composite structures exposed to fires and/or explosions.

Development of hybrid gas turbine bucket technology.
Interactive aircraft flight control and
Hodular Haiti-Function Haiti-Band Airborne Badio
A modern approach to pilot/vehicle analysis and
Performance characteristics and employment
Helicopter rotor trailing edge noise
Helicopter rotor trailing edge noise
Airbus - Perspectives for the future
On the aerodynamics of vindblast
Aerodynamics of a transport aircraft-type
Hultilevel optimum design of structures with
Viscous transonic airfoil flow simulation
Aerodynamic computational procedures for subsonic and
transonic aircraft
Multilevel optimum design of structures with
fiber-composite stiffened-panel components
Aerodynamics of a transport aircraft-type
wing-fuselage assembly
Aerodynamics on a transport aircraft type
wing-body model
On the aerodynamics of windblast
An exploratory research and development program
leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1:
Preliminary process analyses
An exploratory research and development program
leading to specifications for aviation turbine fuel from whole crude shale oil. Part 2:
Process variable analyses and laboratory sample production
An exploratory research and development program
leading to specifications for a-ration turbine fuel from whole crude shale oil. Part 3:
Production of specification of JP-4 fuel from geologically shale oil
The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels
An exploratory research and development program
leading to specifications for aviation turbine fuel from whole crude shale oil. Part 5
Flight service evaluation of advanced structures
The load-carrying behavior of a trapezoidal aluminum-alloy supporting element, subjected to a compressive stress, in the postbuckling region
Cocktail and en route avionics for in-weather operations
Effect of a part span variable inlet guide vane on T/FO fan performance
The effect of radome scattering on RCM antenna patterns
Aerodynamic components for small turboshaft engines
Arbitrary and non-arbitrary exhaust jet induced effects on a V/STOL vehicle design. Part 2: Analysis of results
Aerodynamic and non-arbitrary exhaust jet induced effects on a V/STOL vehicle design. Part 3: Experimental technique
Preliminary results on performance testing of a turbocompound rotary combustion engine
Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations
Thermal expansion accommodation in a jet engine frame
Rearrangement accommodation in a jet engine frame
Theoretical investigations on the influence of different stroke, tail unit, and conventional HAW arrangement as well as of CCT on the aerodynamic characteristics of lighter aircraft configurations
Applications of adaptive control systems
Performance characteristics and employment profiles of the new helicopter NH-90
A modern approach to pilot/vehicle analysis and the real-Smith criteria
Interactive aircraft flight control and aeroelastic stabilization
Multivariable closed loop control analysis and synthesis for complex flight systems
Ultrasonic method for flow field measurement in wind tunnel tests
NAS system load - Utilization of the DARC system
An investigation of automatic guidance concepts to steer a VTOL aircraft to a small aviation facility ship
Viscous transonic airfoil flow simulation
Aerodynamic computational procedures for subsonic and transonic aircraft
Multilevel optimum design of structures with fiber-composite stiffened-panel components
Aerodynamics of a transport aircraft-type wing-fuselage assembly
Aerodynamics on a transport aircraft type wing-body model
On the aerodynamics of windblast
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1:
Preliminary process analyses
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 2:
Process variable analyses and laboratory sample production
An exploratory research and development program leading to specifications for a-ration turbine fuel from whole crude shale oil. Part 3:
Production of specification of JP-4 fuel from geologically shale oil
The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels
An exploratory research and development program
leading to specifications for aviation turbine fuel from whole crude shale oil. Part 5
Flight service evaluation of advanced structures
The load-carrying behavior of a trapezoidal aluminum-alloy supporting element, subjected to a compressive stress, in the postbuckling region
Cocktail and en route avionics for in-weather operations
Effect of a part span variable inlet guide vane on T/FO fan performance
The effect of radome scattering on RCM antenna patterns
Aerodynamic components for small turboshaft engines
Arbitrary and non-arbitrary exhaust jet induced effects on a V/STOL vehicle design. Part 2: Analysis of results
Aerodynamic and non-arbitrary exhaust jet induced effects on a V/STOL vehicle design. Part 3: Experimental technique
Preliminary results on performance testing of a turbocompound rotary combustion engine
Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations
Thermal expansion accommodation in a jet engine frame
Rearrangement accommodation in a jet engine frame
Theoretical investigations on the influence of different stroke, tail unit, and conventional HAW arrangement as well as of CCT on the aerodynamic characteristics of lighter aircraft configurations
Applications of adaptive control systems
Performance characteristics and employment profiles of the new helicopter NH-90
A modern approach to pilot/vehicle analysis and the real-Smith criteria
Interactive aircraft flight control and aeroelastic stabilization
Multivariable closed loop control analysis and synthesis for complex flight systems
Ultrasonic method for flow field measurement in wind tunnel tests
NAS system load - Utilization of the DARC system
An investigation of automatic guidance concepts to steer a VTOL aircraft to a small aviation facility ship
Viscous transonic airfoil flow simulation
Aerodynamic computational procedures for subsonic and transonic aircraft
Multilevel optimum design of structures with fiber-composite stiffened-panel components
Aerodynamics of a transport aircraft-type wing-fuselage assembly
Aerodynamics on a transport aircraft type wing-body model
On the aerodynamics of windblast
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1:
Preliminary process analyses
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 2:
Process variable analyses and laboratory sample production
An exploratory research and development program leading to specifications for a-ration turbine fuel from whole crude shale oil. Part 3:
Production of specification of JP-4 fuel from geologically shale oil
The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels
An exploratory research and development program
leading to specifications for aviation turbine fuel from whole crude shale oil. Part 5
Flight service evaluation of advanced structures
The load-carrying behavior of a trapezoidal aluminum-alloy supporting element, subjected to a compressive stress, in the postbuckling region
Cocktail and en route avionics for in-weather operations
Effect of a part span variable inlet guide vane on T/FO fan performance
The effect of radome scattering on RCM antenna patterns
Aerodynamic components for small turboshaft engines
Arbitrary and non-arbitrary exhaust jet induced effects on a V/STOL vehicle design. Part 2: Analysis of results
Aerodynamic and non-arbitrary exhaust jet induced effects on a V/STOL vehicle design. Part 3: Experimental technique
Preliminary results on performance testing of a turbocompound rotary combustion engine
Fluctuating pressures on fan blades of a turbofan engine: Static and wind-tunnel investigations
Thermal expansion accommodation in a jet engine frame
Rearrangement accommodation in a jet engine frame
Theoretical investigations on the influence of different stroke, tail unit, and conventional HAW arrangement as well as of CCT on the aerodynamic characteristics of lighter aircraft configurations
Applications of adaptive control systems
Performance characteristics and employment profiles of the new helicopter NH-90
A modern approach to pilot/vehicle analysis and the real-Smith criteria
Interactive aircraft flight control and aeroelastic stabilization
Multivariable closed loop control analysis and synthesis for complex flight systems
Ultrasonic method for flow field measurement in wind tunnel tests
NAS system load - Utilization of the DARC system
An investigation of automatic guidance concepts to steer a VTOL aircraft to a small aviation facility ship
Viscous transonic airfoil flow simulation
Aerodynamic computational procedures for subsonic and transonic aircraft
Multilevel optimum design of structures with fiber-composite stiffened-panel components
Aerodynamics of a transport aircraft-type wing-fuselage assembly
Aerodynamics on a transport aircraft type wing-body model
On the aerodynamics of windblast
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 1:
Preliminary process analyses
An exploratory research and development program leading to specifications for aviation turbine fuel from whole crude shale oil. Part 2:
Process variable analyses and laboratory sample production
An exploratory research and development program leading to specifications for a-ration turbine fuel from whole crude shale oil. Part 3:
Analysis of two air traffic samples in the Flight-by-flight corrosion fatigue tests
Automated radar performance evaluation in the Analysis of two air traffic samples in the
Placing forces and rotor noise due to adding forces to a traditional helicopter
Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade
Evaluation of sensitivity of ultrasonic defects detection in graphite joints
B-135 engine depot maintenance repair technology
Air traffic control systems technology from BCD to operational use
SBBAOD. A.
SBBAFIB, B.
SBHBBS, S.
SBBAFIBI, J. S.
SBPOLVBDA, 0.
SBBOS, i. J.
SEME. K. D.
fi.
SBH, B.
SBIG. 6. I.
SBLIZBB. S. H.
SBLLEBS. I. L.
SBLLBBS, B. B.
SBLLUS, B. J.
SELF. U. B.
SBLBB. a. j. a.
SBDBBAK, K. L.
SBID. I.
SELLBBS, D. F.
SBLBZIB7, A. T.

Induction driven transonic wind tunnel 12: Detection and display of wind shear and turbulence

Control of gas turbine power transients for On the design of some airfoils for sailplane

Design and tests of airfoils for sailplanes with

System data communication structures for active-control transport aircraft, volume 1

On the design of some airfoils for sailplane application

Assembly of aircraft instruments

Digital Avionics Information System (DAIS): Development and demonstration

Sophisticated aircraft structure developments - Combat aeroplanes

Computer simulation of an advanced aircraft electrical system

Control of gas turbine power transients for improved turbine airfoil durability

Applications of a laser velocimeter in the Langley 4- by 7-meter tunnel

Laser Doppler anemometry applied to the study of the airflow in the wake of an helicopter rotor

Simplified digital design tools

A three-dimensional approach to lift and moment coefficients of rotating blades

Sealed lead-acid batteries for aircraft applications

Characterization of an Experimental Reference, Banced Speciication (EBBS) aviation turbine fuel and EBBS fuel blends

Source assessment system

Recent results in main beam nulling

Sealed air suspension on a F-4F aircraft

Gust load alleviation on Airbus A 300

Active gust and maneuver load control concepts with the example of the Airbus A300. Part 1: Explanation of a regular in the time zone of wind gust load decrease and examination of its effectiveness in stochastic gusts

Global Positioning System (GPS) geodetic receivers

Application of numerical modeling to gas turbine combustor development problems

Detection and display of wind shear and turbulence

LV measurements with an advanced turboprop

Induction driven transonic wind tunnel T2: Operation at room temperature and cryogenic adaptation

System data communication structures for active-control transport aircraft, volume 1

Control of electrochemical actuator elements for flight vehicles

High-sensitivity holographic plates PI-38

Monitoring engine wear by oil analysis

Aerodynamics of advanced axial-flow turbochargery

Computer image generation: Advanced visual/sensor simulation

Assessment of stereographies for fire control and navigation in fighter aircraft

Application of transonic similarity rule to correct the effects of sidewall boundary layers in two-dimensional transonic wind tunnels

Applying advanced technology to flight station design

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

Application of an advanced technology to flight station design

Flight-determined correction terms for angle of attack and sideslip

Flight-determined correction terms for angle of attack and sideslip

Finite element analysis of some aerospace shell structures

Evaluation of advanced air-to-air quenary fire control systems

Vehicle test report: Batronic pickup truck

Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn

System data communication structures for active-control transport aircraft, volume 2

Control of electrochemical actuator elements for flight vehicles

Monitoring engine wear by oil analysis

Aerodynamics of advanced axial-flow turbomachinery

Computer image generation: Advanced visual/sensor simulation

Assessment of stereographies for fire control and navigation in fighter aircraft

Application of transonic similarity rule to correct the effects of sidewall boundary layers in two-dimensional transonic wind tunnels

Applying advanced technology to flight station design

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

Analysis of two air traffic samples in the terminal area of Frankfurt/Main, August 4th 1978

Application of an advanced technology to flight station design

Flight-determined correction terms for angle of attack and sideslip

Flight-determined correction terms for angle of attack and sideslip

Finite element analysis of some aerospace shell structures

Evaluation of advanced air-to-air quenary fire control systems

Vehicle test report: Batronic pickup truck

Observability of the parameters of an inertial navigation system for a 360-deg coordinated turn
SHALASHIL, V. L.
The stability of monocoque panels under bending p0334 882-29636

SHAH, B.
Production weldbonding on the A-10 aircraft p0327 882-28995

SHAH, D.
Development of a simple, self-contained flight test data acquisition system [NASA-CR-16912] p0369 882-22345

SHAHAN, V.
Computational treatment of transonic canard-wing interactions [AIAA Paper 82-0161] p0115 882-17814

SHANNON, J. B.
Applications of digital avionics to commercial transport aircraft - The DC-10 Super 80 and beyond [AIAA 81-2110] p0047 882-13456

SHANNON, K. B.
Design optimization of rotor systems for tilt-rotor aircraft that fold for shipboard compatibility p0280 882-26399

SHANON, R. H.
Attribute requirements for a simulated flight scenario microcomputer test [AD-A115676] p0594 882-32389

SHAPIRO, A. H.
On evaluating the influence of local disruptions of flow over trailing edge and leading edge flaps from the data of wind tunnel tests of a rectangular wing segment p0015 882-11465

SHAPIRO, A. L.
The integration of multiple avionic sensors and technologies for future military helicopters p0363 882-23186

SHAPIRO, K. Y.
The use of observers on relaxed static stability aircraft p0068 882-14740
Enhanced aircraft handling qualities by longitudinal dynamics mode decoupling p0074 882-14826
Modal control of relaxed static stability aircraft p0048 882-36944

SHAPIRO, N. A.
Structural optimization of a swept wing on the basis of the alleron efficiency condition p0388 882-34145

SHAPIRO, N. V.
Impact-initiated damage thresholds in composites p0018 882-12028

SHARP, P. J.
Transparencies - What an aircraft designer should know p0226 882-24305

SHARP, G. L.
Transformation relations for singularity avoidance in three-dimensional trajectory optimization p0378 882-32137

SHAW, R.
The uses of airships in the Royal Navy p0173 882-20556

SHAW, D. S.
Structural half-span model support system [NASA-CASE-LAB-1244-1] p0370 882-23254

SHAW, J. S.
Tests modeling for helicopter simulation of low speed, low altitude and steeply descending flight [NASA-CR-166385] p0592 882-32374

SHAW, R. E.
Rotor wake characteristics relevant to rotor-stator interaction noise generation [AIAA Paper 81-2031] p0008 882-10456

SHAW, L.
Computer modeling of fan-exit-splatter spacing effects on P100 response to distortion [NASA-CR-167079] p0369 882-23246

SHAW, R. J.
Performance degradation of propeller/rotor systems due to rim ice accretion [AIAA Paper 82-0205] p0297 882-20322
Aircraft icing research at NASA [NASA-TM-2919] p0558 882-30297

SHAW, D. E.
624 manned aircraft demonstrator - Next generation trainer [AIAA Paper 81-2519] p0064 882-14385

SHEPPARD, R. E.
Evaluation of the effect of elastomeric damper material on the stability of a bearingless main rotor system p0280 882-26394
Wind tunnel modeling of rotor vibratory loads p0099 882-02056

SHEFFLER, K. R.
Dynamic stability of low effective flap hinge BANG concepts p0277 882-26377

SHELTON, J. B.
The CIVIC - A concept in vortex induced combustion. II [AIAA Paper 81-07-12] p0017 882-11997

SHELTON, M.
Transparent polyolefin film armor [AD-1107562] p0213 882-17377

SHEN, Y. T.
The principles and methods for shaping the wing root regions of a wing-body combination at transonic and lower supersonic speeds p0033 882-11016

SHEPPE, R. E.
A semiphysical high-speed rotor noise prediction technique p0503 882-40554

SHEPHERD, J. O.
Reconnaissance for carrier landings: Effects of display gain, display noise and aircraft type [AD-1068001] p0264 882-19206

SHERRY, J. W.
Application of a dimensionless criterion of transport efficiency in evaluating aircraft modifications p0334 882-29837

SHERIDAN, P. D.
Math modeling for helicopter simulation of low speed, low altitude and steeply descending flight [NASA-CR-166385] p0592 882-32374

SHELTON, M.
The powerplants of the Yak-40 and -15 aircraft p0463 882-36947

SHEVIN, P.
Group 1: Scenario design and development issues p0098 882-13131

SHEPP, R. S.
Use of optimization to predict the effect of selected parameters on computer aircraft performance [NASA-CR-166439] p0201 882-17151
Use of optimization to predict the effect of selected parameters on computer aircraft performance [NASA-CR-169027] p0451 882-26279

SheCain, E.
The arbitrary quasi-orthogonal surface method for computing three-dimensional flow in turbine machinery. 2. Calculation of the three-dimensional flow with the S sub 1-surface twisted p0033 882-11015

Shi-Che, Y.
A simplified method for predicting thick blade airfoils p0245 882-18124

SHELDOS, R. L.

SHEEBER, T.
A contribution to the holograph method for shock-free transonic airfoil sections p0121 882-18022

SHIB, L.
Finite difference computation of the steady transonic potential flow around airplanes p0031 882-10981

SHELL, T. R.
Requirements for instrument approaches to triple parallel runways [AD-1105622] p0132 882-14079
Requirements for instrument approaches to converging runways [AD-1108075] p0200 882-17144
Survey of 101 DS airports for new multiple approach concepts [AD-1078112] p0209 882-17229
helicopter collaboration
[SMAAS-811-210-101] p0312 A82-21154
SIEGEL, H. A.
Engine industry cost considerations for emerging
technologies
[p0292 A82-27429
SIEGERT, C. D.
Digital active control system for load alleviation
for the Lockheed L-101
[p0104 A82-16147
SIEBERS, P. A.
Thermal-barrier-coated turbine blade study
[NASA-CR-165351] p0028 A82-10040
SIGALL, A.
Airframe–propulsion system aerodynamic
interference predictions at high transonic Mach
numbers including off-design engine airflow
[p0097 A82-13098
SIGGARD, D. E.
An iterative finite element-integral technique for
predicting sound radiation from turbofan inlets
in steady flight
[AIAA PAPER 82-0129] p0115 A82-17796
Acoustic properties of turbofan inlets
[NASA-TN-169016] p0462 A82-27090
SISGEBRLK, R. A.
High temperature composites. Status and future
directions
[NASA-TN-82929] p0559 A82-30336
SILKINIA, J. G.
United States Air Force shale oil to fuels, phase 2
[AD-A114531] p0538 A82-29476
SILVA, A. A.
Subsonic aerodynamic and flutter characteristics of
several wings calculated by the SOUSA P1.1
panel method
[AIAA PAPER 82-0727] p0341 A82-30193
Subsonic aerodynamic and flutter characteristics of
several wings calculated by the SOUSA P1.1
panel method
[NASA-TM-84485] p0405 A82-25216
SILVAS, J. P.
Feedback control of a cantilever wing in steady
airflow
[AIAA 02-0729] p0350 A82-22229
SILVEGIO, F. J.
SU-600 test program
[p0247 A82-10141
SILVERTHORN, J. L.
Design and analysis of a multivariable control
system for a CCY-type fighter aircraft
[AIAA PAPER 82-1350] p0488 A82-39121
Effects of higher order control systems on
aircraft approach and landing longitudinal
handling qualities
[p0563 A82-30048
SILVERTHORN, L. J.
Whirl mode stability of the main rotor of the
FAC-64 Advanced Attack Helicopter
[p0498 ADJ-40513
SILVIOOS, C.
Fire strike protection
[p0046 A82-13246
SIN, A. C.
AD-1 oblique wing aircraft program
[AIAA PAPER 81-2354] p0064 A82-14390
Unique flight characteristics of the AD-1
oblique-wing research airplane
[AIAA PAPER 82-1329] p0488 A82-39106
SINGH, R.
Hurricane-induced wind loads
[PHB-132267] p0476 A82-27548
SINACOS, J. R.
An experimental study of steady and quasi-steady
jet flaps
[p0276 A82-26222
SINACOS, J. V., JF.
Project Sea Hunt: A report on prototype
development and tests
[AD-A109510] p0302 A82-20160
SINACOS, P. D.
The characteristics and detection of low level
wind shear in the critical phases of flight
[p0297 A82-28349
The detection of low level wind shear. II
[p0483 A82-38463
SINSA, H.
Attack on superalloys by chemical and electrolytic
processes
[p0463 A82-14365
SINSA, I.
A set of finite elements developed for the dynamic
computation of composite helicopter blades
[OSMA, TP NO. 1961-87] p0062 A82-13909
SINSA, J. L.
A method for measuring takeoff and landing
performance of aircraft, using an inertial
sensing system
[NLR-Th-80032-0] p0133 A82-14084
A method for applying linear optimal control
to the design of a regulator for a
flexible aircraft
[NLR-Tr-80032-0] p0265 A82-21921
SIPEE, P.
Multi-mission V/STOL with vectored thrust engines
[PHR-90086] p0356 A82-22278
SIPE, W. D.
V/STOL Tandem Fan transition section model test
[NASA-CR-165507] p0312 A82-21158
SIMPSON, R. B.
The structure of a separating turbulent boundary
layer. I - Mean flow and Reynolds streamlines. II -
Higher-order turbulence results
[p0129 A82-10776
SIMPSON, R. D.
Unmanned aircraft in future combat
[p0492 A82-39728
SING, D. L.
Engine component retirement for cause
[p0345 A82-22177
SING, D. G.
Categorization of atmospheric turbulence in terms
of aircraft response for use in turbulence
reports and forecasts
[AD-A109585] p0306 A82-20190
SING, E. L.
Comparison of wind tunnel and theoretical
aerodynamic predictions with flight measured
airloads for the B-1 aircraft
[AIAA PAPER 81-2367] p0065 A82-14393
SINACOR, J. B.
Conceptual design study of a visual system for a
torotorcraft simulator and some advances in
platform motion utilization
[NASA-CR-166322] p0352 A82-22244
SINCLAIR, R. E.
An investigation of multi-axis isometric side-arm
controllers in a variable stability helicopter
[AD-A106759] p0209 A82-17226
SINCLAIR, R. L.
Aircraft measurements and analysis of severe
storms: 1976 field experiment
[NASA-CR-160519] p0259 A82-18603
SINCLAIR, R. M.
Evaluations of helicopter instrument-flight
handling qualities
[AD-A114008] p0524 A82-28285
SINCLAIR, R.
A comparative study of narrowband vocoder
algorithms in Air Force operational environments
using the Diagnostic Rhyme Test
[AD-A112053] p0460 A82-26546
SINCLAIR, J.
The behavior of composite thin-walled structures
in dynamic buckling under impact
[p0513 A82-40976
SINGLETON, R. E.
Aeropropulsion research for the U.S. Army
[AIAA PAPER 82-02-203] p0427 A82-35390
SINGLETON, R. E.
Test and evaluation of improved aircrew restraint
systems
[p0797 A82-14974
Test and evaluation of improved aircrew restraint
systems
[AD-A107576] p0108 A82-16056
SINGLETON, R. M.
Preliminary functional description of integrated
flow management
[AD-A109909] p0313 A82-21171
SINGLETON, R. S. C.
An application of invariance principle to pilot
model for 87-33 aircraft with variable

B-140
A mathematical model of an over-sea airborne DBF Flutter node suppression using hyperstable feedback

A study of the vibration loading of the turbine

Chemistry of combustion of fuel-water mixtures

A study of the effect of the flight vehicle body potential on the characteristics of low altitude transmitters

Fatigue test of the typical main rotor controls componant

Digital control for flexible aircraft using reduced order models

Flutter mode suppression using hyperstable feedback

A mathematical model of an over-sea airborne DBF
SHIBH, S. A.
Determination of the glide path of an aircraft with power off
p0552 A82-43603

SHIBH, J. B.
The Royal Aircraft Establishment: 100 years of research
[RAE-TR-83-432] p0388 A82-24154

SHIB, S. A.
Field research of roll motion of an aircraft
[RAE-TR-89-631] p0351 A82-22292

SHIB, B. A.
Computerized simulation of a jet powered sailplane
p0178 A82-20761

SHIB, C. G.
Atmospheric chemistry of hydrocarbon fuels.
Volume 2: Outdoor chamber data tabulation,
Part 1
[AD-A113665] p0530 A82-28842

SHIB, B. C.
Hydrocarbon fuel chemistry: Sediment water interaction
[AD-A117904] p0612 A82-33552

SHIB, B. A.
Development of avionics installation interface standards
[AD-A116853] p0608 A82-33384

SHIB, D. J.
Digital spectral analysis of the noise from short duration impulsively started jets
p0434 A82-36191

SHIB, D. A.
The military helicopter market today and tomorrow
p0386 A82-34111

SHIB, B. C.
Dynamics of aircraft anti-skid braking systems
[NASA-TP-79-100] p0254 A82-10204

SHIB, C. A.
Dynamics of aeroelastic rotorcraft and the development of a blade structural model
[AD-A114319] p0467 A82-13466

SHIB, B. A.
Evaluation of a trajectory command concept for manual control of carrier approaches and landings
p0563 A82-30856

SHIB, G. C.
Environmental and high strain rate effects on composites for engine applications
[AD-A109-0758] p0336 A82-30118

SHIB, J. B.
Operational test and evaluation handbook for aircrew training devices. Volume 1:
Operational suitability evaluation
[AD-A112269] p0526 A82-28306

SHIB, J. B.
Operational test and evaluation handbook for aircrew training devices. Volume 2:
Planning and management
[AD-A112269] p0537 A82-29332

SHIB, J. B.
Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks
[AD-A103270] p0207 A82-10033

SHIB, J. B.
Analysis of a longitudinal pilot-induced oscillation experienced on the approach and landing test of the space shuttle
[NASA-TH-81-1366] p0100 A82-13149

SHIB, J. B.
Improved penetrant process evaluation criteria
[AD-A115157] p0560 A82-30386

SHIB, B. C.
Predesign study for a modern 4-bladed rotor for the NASA rotor systems research aircraft
[NASA-CR-166153] p0167 A82-16042

SHIB, L. K.
An update of an integrated CNI system - TIES
[AD-A112292] p0049 A82-13500

SHIB, B. B.
Helicopter computer tools - An optimistic outlook
p0556 A82-44470

SHIB, B. C.
Source assessment system
[AD-A111223] p0412 A82-25613

SHIB, B. C.
The impact and future direction of aircraft noise certification
p0296 A82-28150

SHIB, B. C.
The Rolls Royce role in aircraft noise reduction
[PHR-90059] p0319 A82-21210

SHIB, B. C.
The impact and future direction of aircraft noise certification
[PHR-90053] p0322 A82-21788

SHIB, B. C.
Thermodynamics of organic compounds
[AD-A110830] p0318 A82-21202

SHIB, B. C.
Numerical aircraft design using 3-D transonic analysis with optimization, volume 2:
Transport design
[AD-A102331] p0315 A82-21181

SHIB, J. B.
Influence of maneuverability on helicopter combat effectiveness
p0365 A82-23212

SHIB, J. B.
Finite element analysis of through the canopy emergency crew escape from the T-38 aircraft
[NASA 82-7055] p0335 A82-30096

SHIB, B. C.
Propfan installation aerodynamic of a supercritical swept wing transport configuration
[AD-A115-1563] p0009 A82-10466

SHIB, B. C.
Analysis of augmented aircraft flying qualities through application of the Heal-Smith criterion
[AD-A117-1776] p0008 A82-10462

SHIB, L. K.
Problems in correlation caused by propulsion systems
[AD-A112292] p0404 A82-25202

SHIB, L. K.
Notes on lateral-directional pilot induced oscillations
[AD-A113996] p0474 A82-27322

SHIB, J. B.
User's manual for the vertical axis ving turbine
code TOATK2
[DSB-000796] p0461 A82-26828

SHIB, B. C.
Synchronous fault-tolerant flight control systems
[AD-A112309] p0001 A82-10083

SHIB, B. C.
System data communication structures for active-control transport aircraft, volume 1
[NASA-CR-165773-VM1-1] p0538 A82-29510

SHIB, B. C.
System data communication structures for active-control transport aircraft, volume 2

PERSONAL AUTHOR INDEX

SOBBICH, T. p0292 A82-27423

SOBBICH, T. p0292 A82-27423

Baseline data on utilisation of low-grade fuels in
gas turbine applications. Volume 3: Emissions
evaluation [NASA-JF-93764] p0031 A82-10259

SOBER, J. p0026 A82-26567

Sonic fatigue testing of an advanced composite
aerolos [AIAA PAPER 81-0634]

SOBER, W. C. p0026 A82-26567

Correlation of predicted vibrations and test data
for a wind tunnel helicopter model

SOBER, B. p0089 A82-40515

Coupled rotor/airframe vibration analysis program
manual manual. Volume 1: User's and
procedure manuals [NASA-CR-165891] p0573 A82-31965

SOBER, B. p0089 A82-40515

Coupled rotor/airframe vibration analysis program
manual manual. Volume 2: Sample input and output
listings [NASA-CR-165892] p0573 A82-31966

SOBER, B. p0089 A82-40515

Formulation and characterisation of polyamide
resinous foams for a variety of densities for
aircraft seating applications [NASA-CR-167421] p0090 A82-12320

SOBERBORN, J. B. p0488 A82-39107

Analysis of in-trail following dynamics of
CDD-equipped aircraft [AIAA PAPER 82-1330]

SOBERBORN, J. B. p0488 A82-39107

An investigation of automatic guidance concepts to
steer a VTOL aircraft to a small aviation
facility ship [NASA-CR-152047] p0191 A82-16297

SOBERBORN, J. B. p0488 A82-39107

Computation of the steady viscous flow over a
tri-element 'augmentor wing' airfoil
[AIAA PAPER 82-0021] p0114 A82-17735

SOBER, R. p0127 A82-16075

A mathematical model of a subsonic transport
aircraft

SOULAR, L. p0338 A82-30145

Bonded aluminum honeycomb - aircraft flight
surface primary structure application
[AIAA PAPER 82-0676]

SPADAKCZE, L. J. p0422 A82-35307

Deposition formation in hydrocarbon fuels
[ASHE PAPER 82-02-49]

SPARL, C. E. p0204 A82-17176

Damage tolerant design for cold-section turbine
engine disks [AD-A107863] p0204 A82-17176

SPARL, R. E. p0061 A82-13963

Theoretical analysis of wake-induced parachute
collapse [AIAA PAPER 81-1922]

SPARL, C. E. p0338 A82-30146

Design considerations and experiences in the use
of composite material for an aerelastic
research wing [AIAA PAPER 82-0678]

SPARL, C. E. p0338 A82-30146

Design considerations and experiences in the use
of composite material for an aerelastic
research wing [NASA-TM-83291] p0523 A82-28280

SPANGELE, J. T. p0466 A82-27269

Aircraft landing gear design for air traffic
tcontrol applications: A preliminary evaluation
[AD-A107323]

SPANGELE, J. T. p0466 A82-27269

High-speed rotary printing device for air traffic
control applications: A preliminary evaluation
[AD-A107323]

SPANGELE, J. T. p0466 A82-27269

Aircraft meteorological data relay/ARMDAB/
p0579 A82-45822

SPARE, D. A. p0190 A82-16091

Study of controlled diffusion stator blading. 1.
Aerodynamic and mechanical design report
[NASA-CR-165500]

SPARE, D. A. p0190 A82-16091

Data acquisition system for NASA LaRC impact
aircraft research facility
[AIAA PAPER 81-28450] p0561 A82-30525

SPARKMAN, J. H. p0227 A82-24312

Washield system structural enhancement

SPARKMAN, J. H. p0227 A82-24312

A practical approach to systems mode analysis
[AIAA PAPER 81-DETR-130] p0162 A82-19344

SPARKMAN, J. L. p0227 A82-24312

On-board communication for active-control
transport aircraft [AIAA 81-2321] p0052 A82-13520

SPARKMAN, J. L. p0227 A82-24312

A Microwave Landing System simulation

SPARKMAN, J. L. p0227 A82-24312

The Shiryayev sequential probability ratio test
for redundancy management [AIAA 82-1623] p0486 A82-38999

SPARKMAN, K. A. p0227 A82-24312

Noise measurements on the helicopter BK 117
design. Weighted noise levels and influence of
airspeed [AFPL-MIT-81-18] p0270 A82-19957

SPARKMAN, K. A. p0227 A82-24312

LET - An advanced aviation system design
[AIAA 81-2249] p0400 A82-13472

SPARKMAN, K. A. p0227 A82-24312

Design and fabrication of covered composite
heat-stiffened panels
p0513 A82-40978

SPARKMAN, D. M. p0379 A82-32920

Cloud top remote sensing by airborne lidar

SPARKMAN, D. M. p0379 A82-32920

Aerostucture nondestructive evaluation by thermal
field detection, phase I: Fundamental
information and basic technique development
[AD-A115724] p0563 A82-32425

SPARKMAN, E. E. p0227 A82-24312

Noise measurements on the helicopter BK 117
design. Weighted noise levels and influence of
airspeed [AFPL-MIT-81-18] p0270 A82-19957

SPARKMAN, E. E. p0227 A82-24312

The Flight Service Automation System (FSAS) system
benchmark. Volume 1: Summary, introduction and
concepts [PB82-14538] p0468 A82-27277

SPARKMAN, E. E. p0468 A82-27277

The Flight Service Automation System (FSAS) system
benchmark. Volume 2: The model of the
application [PB82-14546] p0468 A82-27278

SPARKMAN, E. E. p0468 A82-27278

The Flight Service Automation System (FSAS) system
benchmark. Volume 3: The vendor interface
package [PB82-14553] p0468 A82-27279

SPARKMAN, E. E. p0468 A82-27279

A new class of routing protocols for a proposed
computer network linking tactical radar sites
p0553 A82-43893

SPARKMAN, E. E. p0553 A82-43893

Aircraft network impact on aircraft engine
designs of the 1990's [ASHE PAPER 82-07-276] p0249 A82-35453

SPARKMAN, D. M. p0249 A82-35453

The influence of sensor and actuator
characteristics on overall helicopter AFCS design
p0251 A82-18171

SPARKMAN, D. M. p0251 A82-18171

Results of the AH-64 Structural Demonstration
p0502 A82-40551

SPARKMAN, D. M. p0502 A82-40551

Oscillations and Vibrations of aircraft on runways
p0241 A82-24974

SPARKMAN, D. M. p0241 A82-24974

Mediating Hake's mechanics - Bombs away
p0556 A82-44467

SPARKMAN, D. M. p0556 A82-44467

Terrestrial boundary-layer development on a
two-dimensional aerofly with superefficient flow
at low Reynolds number
p0389 A82-34398

SPARKMAN, D. M. p0389 A82-34398

Pressure distributions on some delta wings at H = 4
at low Reynolds number
p0389 A82-34398
and fifth-scale wind tunnel tests of a Bell helicopter rotor Model 222 [NASA CR-166362] p0535 882-29315

SQUIRES, L. A. Ejector powered propulsion and high lift supersonic wing p0512 882-60970

SRI-JAYATNA, H. A microprocessor-based data acquisition system for stall/spin research [AIAA 81-2177] p0002 882-10126

SHIDRAH, E. F. A Schwartz-Christoffel method for generating internal flow grids p0328 882-29005

SHIDRAH, M. L. C. Primary sewage treatment plant as a source of bird hazards at airport p0362 882-33523

Primary sewage treatment plant as a source of bird hazards at airport p0413 882-26184

SHIVAYASH, A. V. Dry friction damping mechanisms in engine blades [AIAA PAPER 82-GT-162] p0426 882-35383

SHIVAYASH, C. Computation of wing-vortex interaction in transonic flow using implicit finite difference algorithm [NASA CR-166251] p0312 882-21159


STADD, N. R. Restoration of performance, Models 727, 737, and 747 p0333 882-28406

STACHT, L. E., Jr. Bonding procedure for Teflon seals p0567 882-62792

STACHT, C. M. Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures [NASA CR-166577] p0268 882-19258

STADLEB, C. J., Jr. Application and testing of metallic coatings on graphite/epoxy composites p0435 882-37074

STADLEB, S. Use of high conical flow theory for the determination of the pressure distribution on the wave rider and its agreement with experimental results for supersonic flow p0154 882-19197

The problem of calculation of the flow around helicopter rotor blade tips p0250 882-18160

On the calculation of transonic blade tip flow for helicopter rotors [882-00-320-01-0] p0252 882-18187

The problem of calculation of the flow around helicopter rotor blade tips [882-00-330-01-0] p0406 882-25233

STADLEB, J. W. Assessment of Avionic Equipment Field Reliability and Maintainability as Functions of Unit Cost [AD-A109373] p0266 882-19218

STADLEB, J. Evaluation of the effect of elastomeric damping material on the stability of a bearingless main rotor system p0280 882-26394

STADLEB, J. L. Dynamic stability of low effective flap hinge BHE concepts p0277 882-26377

Predesign study for a modern 4-bladed rotor for the NASA rotor systems research aircraft [NASA CR-166153] p0107 882-16042

STALLINGS, R. L., Jr. Store separation from cavities at supersonic flight speeds [AIAA PAPER 82-0732] p0185 882-22096


STALLING, R. J. Blade loss transient dynamic analysis of turbomachinery [AIAA PAPER 82-1057] p0415 882-33982

STALOHI-DOSHKASZ, J. Evaluation of advanced air-to-air gunnery fire control systems p0069 882-14750

STAREDSIT, R. A. FUEL BASELINE TECHNIQUE INTEGRATION SUPPORT Facility support processor [AD-A111483] p0408 882-25249

STARDER, A. Analytical determination of undercarriage retraction kinematics p0005 882-10364

STANDER, C. B. Fault isolation DFX for increased productivity p0545 882-42210

STANDER, R. N. Application and testing of metallic coatings on graphite/epoxy composites p0435 882-37074

STANDER, R. M. Calculations of lightning return stroke electric and magnetic fields above ground p0314 882-17714

STANDS, W. A. Analysis of rotating structures using image derotation with multiple pulsed lasers and source techniques p0436 882-36999

STANG, W. C. An investigation of dual mode phenomena in a mistuned blade-disk [ASEE PAPER 82-DT-133] p0162 882-19347

STANLEY, C. W. Maintenance problems associated with the operation of the F100 /Pegasus/ engine in the AV-8A /Harrier/ aircraft [AIAA PAPER 81-2546] p0109 882-16915

STAPLEFORD, R. L. Functional requirements for the non-vehicle systems research facility [NASA CR-166315] p0352 882-22240

STARE, D. Options for GFE precision automated tracking system p0043 882-13020

STARE, J. Design procedures for compressor blades p0109 882-17135

STARE, O. C. Analyzing stable pad disturbances and design of a sensor vault to monitor pad stability [AIAA 82-1505] p0486 882-39011

STARK, R. E. The U.S. airline industry--En route to deregulation p0385 882-33920


Marine Air Traffic Control and Landing System (NATCALS Investigation), volume 2 [AD-A110362] p0396 882-24189

Marine Air Traffic Control and Landing System (NATCALS Investigation) [AD-A107380] p0466 882-27260

STARE, R. L. Conceptual design study for an advanced cab and visual system, volume 1 [NASA CR-166325] p0410 882-25266

Conceptual design study for an advanced cab and visual system, volume 2 [NASA CR-166326] p0410 882-25267

STAPES, D. V. Propulsion study for Small Transport Aircraft Technology (STAP) [NASA CR-165699] p0027 882-10037

B-145
STADTFELD, B.
A unified and generalized definition of static longitudinal stability in aircraft: p0377 A82-32135
p0503 A82-400876

Fluctuating forces and rotor noise due to distorted inflow p0510 A82-40965

STARKS, J. L.
Digital Advance Information System (DAIS) Development and demonstration [AD-A107906] p0190 A82-16079
STARKS, R.
Cost/benefit studies of advanced materials technologies for future aircraft turbine engines; Materials for advanced turbine engines [NASA-CR-167649] p0400 A82-25254
STECK, E. H.
The integration of control and display concepts for improved pilot situational awareness [AIAA 81-12384] p0467 A82-22707

STECK, R. M.
Calculation of level flow using radial grating p0404 A82-38922

STECK, R. M.
The aviation route forecast /ABF/ program - an interactive system for pilot-briefing p0553 A82-432621

STEEL, R.
Distributed intelligence for air fleet control [AD-A106611] p0253 A82-18195
Scenario for evolution of air traffic control [AD-A112566] p0467 A82-27270

STEEVES, L. C.
Simulation of the interaction between airdrop platforms and aircraft rollers [AD-A116370] p0566 A82-31324

STEFKO, G. L.
Propeller flow visualization techniques p0597 A82-32672

STEIN, R. J.
Computation of wing-vortex interaction in transonic flow using implicit finite difference algorithms [NASA-CR-166254] p0312 A82-21159

STEIN, C.

STEIN, C.
Self-tuning regulator design for adaptive control of aircraft wing/store flutter p0570 A82-45528
LQG-based multivariable design: Frequency domain interpretation p0029 A82-10053
LQG multivariable design tools p0030 A82-10054

STEIN, R.
Experimental investigation of a helmet mounted night/display for helicopter p0992 A82-13060
Experimental investigation of visual aids for helicopters: Low level flight at night and poor visibility p0251 A82-18168

STEIN, S. L.
The Global Positioning System Evaluator [AIAA 80-2435] p0101 A82-21588

STEINBERG, L. P.
Low-frequency eddy current inspection of aircraft structure p0103 A82-21900

STEINBERG, B. A.
Distributed airborne array concepts p0342 A82-31669

STEINBERG, B.
The NASA AHEP program - Developing new concepts for accurate flight planning [AIAA PAPER 82-0390] p0118 A82-17894

Airline flight planning - The weather connection [SAF PAPER 81067] p0231 A82-24386

STERNBERGER, R.
Nondestructive testing in aircraft construction using holographic methods p0513 A82-40977

STERNBERGER, J. H.
The outlook for advanced transport aircraft p0181 A82-21371
Commercial transport developments for the 1980's p0306 A82-34109

STERNBERGER, M.
Vibration qualification of external aircraft stores and equipment [ARB-P-72/5/68/46] p0320 A82-21218

STERNBERGER, J. H.
The effect of ejector augmentation on test-section axial flow compressor performance by a meanline stage stacking method p0408 A82-25250

STERNBERGER, V. E.
The effect of ejection augmentation on test-section axial flow quality in the Calypso 8-ft transonic wind tunnel [AIAA 82-0571] p0236 A82-24658
Tunnel-to-tunnel correlation p0400 A82-25200
Correlation of Preston-tube data with laminar skin friction (Log No. 12087) p0530 A82-29556

STERNBERG, D.
Flight test data acquisition and interpretation p0339 A82-24707

STERNBERG, G. C.
Have we overlooked the pilot's role in an automated flight deck [AIAA 81-22428] p0048 A82-13481
The integration of control and display concepts for improved pilot situational awareness p0601 A82-13972

STERNBERGER, W. L.
The effect of hybrid composite materials on the dynamic characteristics of helicopter rotor blades p0491 A82-39283

STERNBERG, R. L.
Design for turbomachinery blade variations in subsonic flow p0142 A82-15048

STERNBERGER, R. L.
A possible way of specifically correcting locating and navigational errors caused by reflection and other propagation anomalies [ESA-TT-667] p0253 A82-18198

STERNBERGER, R. L.
Development of accelerated fuel-engines qualification procedures methodology, Volume 1 [AD-A113661] p0470 A82-27317

STERNBERGER, M. H.
Develop, demonstrate, and verify large area composite structural bonding with polysilane adhesives [NASA-CR-165839] p0459 A82-26465

STERNBERGER, R. L.
A microprocessor-based data acquisition system for stall/spin research [AIAA 81-2177] p0002 A82-10126
Design and flight test of a lateral-directional command augmentation system [AIAA 81-2331] p0052 A82-13527
Design and flight testing of digital direct side-force control laws [AIAA 82-1521] p0408 A82-30941
Investigation of air transportation technology at Princeton University, 1981 p0446 A82-26212
Pilot opinions of stall/rollback effects in lateral directional control p0563 A82-30849

STERNBERGER, V. E.
Improving the accuracy of the estimates of surfactant content in jet fuel p0210 A82-23250

STERNBERGER, U. U.
Computer aided investigation of turbomachinery aerodynamics and aerelasticity p0210 A82-23250
STEBBiSOB. D. L.

An experimental investigation of the flow field of an ejector wing design employing a photon correlation laser velocimeter

[AD-111113]

Airport/Community Noise

[NASA-CP-2741]

p0564 882-31070

STEBBiSOB. f. C.

A status review of NASA's COSAM (Conservation Of Strategic Aerospace Materials) program

[NASA-TP-80552]

p0397 882-24526

STEBBiSOB. D.

Multibody aircraft study, volume 1

[NASA-CP-165820-VOL-1]

p0588 882-32344

Multibody aircraft study, volume 2

[NASA-CP-165820-VOL-2]

p0588 882-32345

STEBBiSOB. L. B.

A navigation systems planning model

p0022 882-12640

STEBBiSOB. R.

Design criteria for flightpath and airspeed control for the approach and landing of STOL aircraft

[NASA-TP-1911]

p0305 882-20187

STEBBiSOB. R. W.

Performance of the AEDC Mark I Aerospace Environmental Chamber without oil diffusion

[AD-111106]

p0457 882-26322

STEBBiSOB. D. B.

Airborne data analysis/monitor system

p0138 882-14830

STEBBiSOB. P.

Thermal and flow analysis of a convection, air-cooled ceramic coated porous metal concept for turbine vane

[AER PAPER 81-89-48]

p0012 882-10952

STEBBiSOB. R. L.

Some thoughts on design optimization of transport helicopters

p0273 882-25771

Factors shaping conceptual design of rotary-wing aircraft

p0400 882-37773

STELEN, F. L.

On evaluating the influence of local disruptions of flow over trailing edge and leading edge flaps from the data of wind tunnel tests of a rectangular wing segment

p0015 882-11465

STELEN, A. B.

Stage-state reliability analysis technique

p0196 882-17104

STELEN, F.

Panel Optimization with Integrated Software (POIS) Volume 2. User instructions: BCOH and BAOHTS

[AD-1112224]

p0475 882-27431

STEENFIELD, L. J.

An investigation of rotor harmonic noise by the use of small scale wind tunnel models

[NASA-CP-166337]

p0371 882-24050

STEYN, E. M.

The effects of weather on runway operations

p0285 882-27050

STEYER, D. E.

Experimental investigations on the flow in the impeller of a centrifugal fan

[AER PAPER 82-07-37]

p0421 882-35298

STEYER, W. A.

The net-skirt to a parachute canopy as a device to prevent inversion

[AIAA PAPER 81-1927]

p0007 882-10412

STEYER, V. C.

Proned-lift STOL aircraft shipboard operations - A comparison of simulation, land-based and sea trial results for the G138

[AIAA PAPER 81-2680]

p0059 882-13938

Quiet Short-Haul Research Aircraft - The first 3 years of flight research

[AIAA PAPER 81-2625]

p0156 882-19209

STEVSON, D. L.

The use of 'Eapton's' polyimide film in aerospace applications

[SAN PAPER 811091]

p0234 882-24413

STEVSON, D.

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept

[NASA-CR-160745]

p0322 882-21999

STEVANT, L. C.

Spin tests of a single-engine, high-wing light airplane

[NASA-TP-1927]

p0189 882-16068

STEWART, R. D.

 Boise-Con III: Proceedings of the National Conference on Noise Control Engineering, North Carolina State University, Raleigh, NC, June 4-10, 1981

p0128 882-18726

STEWART, R. E.

Quick learning diagnostics

p0172 882-20543

STEWART, R. B.

An investigation of the use of a propulsive wing/canard concept for improved maneuvering

[ALT PAPER 81-2622]

p0107 882-16905

STICKLE, J. E.

Meteorology impact on future aircraft design

p0340 882-21143

STIMBERG, C.

Hypothetical fatigue life problems - Application of aeroelastic method

p0240 882-24716

FATIGUE ANALYSIS OF EOMPOSITE MATERIALS IN THE TAILSAFE CONCEPT

[NASA-TP-76671]

p0304 882-20175

STIEFFEN, H.

Experiments on propeller noise

p0359 882-22978

STINE, L. E.

Advanced integrated CHI architectures

p0070 882-14763

STITE, R. B.

NASA research in supersonic propulsion - A decade of progress

[AIAA PAPER 82-10968]

p0497 882-40417

NASA research in supersonic propulsion: A decade of progress

[NASA-TP-20622]

p0454 882-26300

STODER, L. C.

Marine Air Traffic Control and Landing System (METALS) Investigation

[AD-1113047]

p0468 882-27276

STOCK, D. J.

Adaptive multifunction sensor concept for air-ground missions

p0471 882-27299

STOCKER, F. J.

Experimental study of fuel heating at low temperatures in a wing tank model, volume 1

[NASA-CR-165391]

p0060 882-11224

Experiments on fuel heating for commercial aircraft

[NASA-TP-82078]

p0459 882-26403

Experiments on fuel heating for commercial aircraft

[NASA-CR-167912]

p0571 882-31546

STOOP, B. M.

Fatigue substantiation of non-linear structures for air-ground missions

p0013 882-11224

STOOGES, C.

The design and development of the Tornado engine air intake

p0094 882-13074

STOFFLER, G.

Carbon-fiber composites - A fiber composite material for highly stressed light-construction components

p0200 882-28905

STOFFLER, R. L.

The cargo helicopter - A logistical vehicle

p0200 882-24717

STOOGES, B. M.

A system safety model for developmental aircraft programs

[NASA-CR-2531]

p0350 882-22228

STOLL, F.

Hydrogen Air Traffic Control and Landing System (HATCS) Investigation

[NASA-CP-8261]

p0199 882-31546

STOLL, F.

Large-scale wind tunnel tests of a single-engine, high-wing light airplane

[ALT PAPER 81-2622]

p0156 882-19208

Application of thrusting ejectors to tactical aircraft having vertical lift and short-field
STOLPE, P. C.  
Propulsion study for Small Transport Aircraft Technology  
[NASA-CR-165499]  
p0027 682-10037

STOLPSTAD, J. R.  
Evaluation of superplastic forming and co-diffusion bonding of Ti-6Al-4V titanium alloy expanded sandwich structures  
[NASA-CR-165627]  
p0268 682-19358

STORF, C. B.  
Robust Kalman filter design for active flutter suppression systems  
p0862 682-38442

STORF, D. E. R.  
Non-destructive inspection and the implementation of a damage tolerant design philosophy  
[RAD-M-520CT-982]  
p0322 682-21601

STORF, J. R.  
NASA research in supersonic propulsion - A decade of progress  
[AIAA PAPER 82-1048]  
p0497 682-20417
NASA research in supersonic propulsion: A decade of progress  
[NASA-TM-82662]  
p0654 682-26300

STORKE, R. L.  
Air-to-ground MTI radar using a displaced phase center, phased array  
p0075 682-14681

STORKE, R. G., Jr.  
Turbochop cargo aircraft system study  
[NASA-CR-165813]  
p0189 682-16070

STORKE, R. E.  
Seven years experience with Kevlar-49 in the Lockheed L-1011 Tristar  
p0203 682-12647

Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft  
[NASA-CR-165841]  
p0357 682-22316

STORR, E. R.  
The effect of induced sound on the flow around a rectangular body in a wind tunnel  
p0276 682-26194

STORPHEL, J.  
Investigations of helicopter structural dynamics and a comparison with ground vibration tests  
[88-B-003-60-0]  
p0315 682-21186

Approach to dynamic qualification of light helicopter stores and equipment  
p0344 682-22166

STORAAGE, L. F.  
Blade loss transient dynamic analysis of turbomachinery  
[AIAA PAPER 82-1057]  
p0615 682-34902

Foreign object impact design criteria, volume 2  
[AD-A112701]  
p0673 682-27313

Foreign object impact design criteria, volume 3  
[AD-A112497]  
p0673 682-27314

STORSH, B. F. R.  
Simulation of turbofan engine models in the Heybridge low speed wind tunnel  
[RAD-INFOH-1972-46]  
p0319 682-21212

STORL, C. E.  
A laser-interferometer method for determining the forces on a freely-flying model in a shock-tunnel  
[AD-A1102408]  
p0667 682-27267

STORR, R. E.  
Service sensitivity of polysulfide sealants  
p0291 682-27407

STORY, M. A.  
Electronic Warfare Avionics Integration Support Facility support processor  
[AD-A1111641]  
p0608 682-25249

STRAAT, R. C.  
Propulsion opportunities for future commuter aircraft  
[AIAA PAPER 82-1089]  
p0697 682-20418
Future propulsion opportunities for commuter airplanes  
[NASA-TM-82880]  
p0396 682-24203

Propulsion opportunities for future commuter aircraft  
[NASA-TM-82915]  
p0654 682-26298

STRAIHS, J. A.  
A technical assessment of aeronautical engineering in Israel  
[AD-A1069080]  
p0662 682-27218

STRAUS, G. L.  
General turret system model determination and controller performance testing  
[AD-A117607]  
p0608 682-33360

STRAIGHT, K. E.  
Performance of a 2D-Coaxial asymmetric exhaust nozzle on a turbojet engine at altitude  
[AIAA PAPER 82-1137]  
p0497 682-20420

STRAIGHT, R.  
Energy environment study  
[NASA-CR-168458]  
p0215 682-17650

STRAEGER, W.  
Advanced compressor components. Phase I: 1978 to 1979  
[RMT-PP-81-025]  
p0144 682-15073

STREBBER, J. R.  
Digital Avionics Information System (DAIS): Development and demonstration  
[AD-A107996]  
p0190 682-16079

STRAA, E. K.  
Application of the finite element method to rotary wing aerelasticity  
[NASA-CR-165854]  
p0308 682-20561

STRAAC, D. G.  
Evaluation of a meteorological airborne pulse Doppler radar  
p0562 682-30820

STRAIGHT, R.  
Variable geometry airfoils as applied to the Bently B-5 and B-6 sailplanes  
p0512 682-40968

STRECEBACH, J. R.  
Aircraft noise reduction  
p0580 682-45046

STREEDHO, G. K.  
Aircraft noise reduction  
p0468 682-27281

STREET, M.  
Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept  
[NASA-CR-166765]  
p0322 682-21999

A research program to reduce interior noise in general aviation airplanes. Influence of depressurization and damping material on the noise reduction characteristics of flat and curved stiffened panels  
[NASA-CR-165935]  
p0462 682-27088

STREEL, M.  
Survey of active and passive means to reduce rotorcraft vibrations  
p0444 682-37946

STRECKER, R.  
Standard tests of a research model rotor in a wind tunnel, including model similarity  
[ERG-TP-79-16]  
p0025 682-10016

STREEDW, M. J.  
User's manual for the vertical axis wind turbine code VAWT2  
[DER-02-000756]  
p0661 682-26628

STREIS, R. E., Jr.  
Calibration and performance of the NASA/AFRQ tunnel C, each number 4, aerothermal wind tunnel  
[AD-A116279]  
p0571 682-31338

STROECK, J.  
Telemetry Computer System at Wallops Flight Center  
p0290 682-27188

B-148
TALLIO, T.
Notating stall in blade rows operating in shear flow [AIAA Paper 82-22209]

Three-dimensional analysis of cascade flutter in parallel shear flow p0164 A82-15062

TAKEDA, T.
Aerodynamic noise generated by jet wing/tip interactions of the external USB configuration of STOL aircraft. Part 2: Full scale model experiment using \( \text{KX710 turbofan engines} \) [NAS-TX-6872-PF-2] p0270 A82-19945

TAKEDA, C.
Lineup of the \( \text{KX-series aircraft - derivative gas turbines} \) p0659 A82-22896

TAKEDA, Y.
Development of high loading, high efficiency axial flow turbine p0563 A82-47069

TALABOV, L. V.
The effect of the shape of a body on the efficiency of its utilization as a flame stabilizer p0261 A82-26483

TALAY, T. L.
Solar-powered airplane design for long-endurance, high-altitude flight [AIAA Paper 80-0811] p0376 A82-31984

TALLIO, W.
Terminal air traffic control with surveillance data from the node 5 systems: Results of system demonstrations to field controllers [AD-A112622] p0467 A82-27268

TALISIB, V. A.
Basic problem of aircraft gas turbine engine analytic design. II p0014 A82-11463

TAI, G. L.
Workshop report for the AIAA 6th Aeroacoustics Conference p0103 A82-16091

Shock associated noise of supersonic jets from convergent-divergent nozzles p0378 A82-32202

TARUSOS, H. L.
The Shock and Vibration Digest, Volume 14, No. 7 [AIAA Paper 82-0336] p0086 A82-15047

The Shock and Vibration Digest, Volume 14, No. 3 [AIAA Paper 82-0231] p0124 A82-19786

TARB, G. L.
A design study of the Marshell (BO-262) p0265 A82-19215

TARMAK, R.
Aerodynamic response of a blade in pitching oscillation with partial and full separation p0142 A82-15047

TARFA, D. B.
Rotor technology for electric Remotely Piloted Vehicle (RPP) [AD-A117732] p0612 A82-33651

TARRA, A.
Application of multiple model estimation techniques to a recursive terrain height correlation system p0070 A82-14768

A recursive terrain height correlation system using multiple model estimation techniques [AIAA 82-1513] p0404 A82-38937

TAKEMOTO, R. L.
A study of the effects of long-term exposure to fuels and fluids on the behavior of advanced composite materials [NASA-CR-165763] p0258 A82-18237

TANN, C.
Composite fasteners - A compatible joining technique for fibrous composites in structural design p0289 A82-27159

TANG, G. L.
The airplane manufacturer and meteorology p0579 A82-45821

TANN, K. L.
Shock associated noise of supersonic jets from convergent-divergent nozzles p0378 A82-32202
<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TILL, E. G.</td>
<td>Instrumentation to determine the suitability of RVH systems for helicopter navigation in the national airspace system</td>
</tr>
<tr>
<td>TILL, E. G.</td>
<td>The helicopter Waystar GPS test program</td>
</tr>
<tr>
<td>TILLABY, N. L.</td>
<td>Air service, airport access and future technology</td>
</tr>
<tr>
<td>TILLABY, N. L.</td>
<td>Allowance for flow nonuniformity in the annulus sections in the optimal contouring of the expanding part of a nozzle</td>
</tr>
<tr>
<td>TILLOTSON, L. B.</td>
<td>Analysis and wind tunnel tests of a probe used to sense altitude through measurement of static pressure</td>
</tr>
<tr>
<td>TINTON, E. J.</td>
<td>Development of accelerated fuel-engines qualification procedures methodology, Volume I</td>
</tr>
<tr>
<td>TINDBERG, H.</td>
<td>Test facility and data handling system for the development of aerial compressors</td>
</tr>
<tr>
<td>TINSFELD, J.</td>
<td>The F-10,79 test program</td>
</tr>
<tr>
<td>TING, Y. L.</td>
<td>Effects of elastomeric additives on the mechanical properties of epoxy resin and composite systems</td>
</tr>
<tr>
<td>TING, Y. L.</td>
<td>Gas-theoretical method for the synthesis of aircraft control during landing approach</td>
</tr>
<tr>
<td>TISCHBEIN, H. R.</td>
<td>B4S4 research programs responding to workshop recommendations</td>
</tr>
<tr>
<td>TITAN, R.</td>
<td>Three-dimensional separation and reattachment into major terminal areas using BHAV, BLS, and CDTI</td>
</tr>
<tr>
<td>TOBBELE, E.</td>
<td>The impact of increasing energy costs upon the design philosophy of avionic fuel management systems</td>
</tr>
<tr>
<td>TOBBEN, B.</td>
<td>Aircraft radio communications equipment: Design and use</td>
</tr>
<tr>
<td>TOBBEN, B.</td>
<td>Structural analysis of fuselages with cutouts by finite element method</td>
</tr>
<tr>
<td>TOBSEN, L.</td>
<td>Performance analysis of the test results on a two-stage transonic fan</td>
</tr>
<tr>
<td>TIESE, L.</td>
<td>Aircraft structural concepts for automatic control systems</td>
</tr>
<tr>
<td>TIPPS, S. H.</td>
<td>Control law design to meet constraints using STAPAC/c-programs package for active controls</td>
</tr>
<tr>
<td>TIGHEBAH, J.</td>
<td>Calculation of the contributions of air traffic and road traffic to air pollution in the region of Schiphol airport in 1974</td>
</tr>
<tr>
<td>TIDDIN, J.</td>
<td>Theory and experiment in unsteady aerodynamics</td>
</tr>
<tr>
<td>TILKES, E.</td>
<td>Analysis of the effects of smoke suppression fuel additives on engine and test cell exhaust gas.opacities</td>
</tr>
<tr>
<td>TILLABY, N. L.</td>
<td>Distributed intelligence for air fleet control</td>
</tr>
<tr>
<td>TILLABY, N. L.</td>
<td>Scenarios for evolution of air traffic control</td>
</tr>
<tr>
<td>TILLETSON, L. B.</td>
<td>Finite element thermal analysis of convectively-cooled aircraft structures</td>
</tr>
<tr>
<td>THABER, C. N.</td>
<td>Laboratory-scale simulation of underground coal gasification: Experiment and theory</td>
</tr>
<tr>
<td>TAYLOR, J. F.</td>
<td>The impact of increasing energy costs upon the design philosophy of avionic fuel management systems. Volume II: Appendices</td>
</tr>
<tr>
<td>TAYLOR, L.</td>
<td>Configuratiop management techniques for automatic control systems</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>F/A-18 roll rate improvement program</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>F/A-18 weapon system development</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Supersonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>B4S4 research programs responding to workshop recommendations</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Analysis of nonlinear stability of aircraft at high angles of attack</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Handling qualities criteria for flight path control of V/STOL aircraft</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>The outlook for advanced transport aircraft</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Gas-theoretical method for the synthesis of aircraft control during landing approach</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Propulsion systems control design and simulation</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Three-dimensional separation and reattachment into major terminal areas using BHAV, BLS, and CDTI</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Real-time simulation of helicopter IFB approaches into major terminal areas using BHAV, BLS, and CDTI</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Automatic runway field management systems and use</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Aircraft radio communications equipment: Design and use</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Structural analysis of fuselages with cutouts by finite element method</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Performance analysis of the test results on a two-stage transonic fan</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>A computer program for the prediction of near field noise of aircraft in cruising flight: User's guide</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Control law design to meet constraints using STAPAC/c-programs package for active controls</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Calculation of the contributions of air traffic and road traffic to air pollution in the region of Schiphol airport in 1974</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Theory and experiment in unsteady aerodynamics</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>On the use of carbon composites in slat and stabilizer construction</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>The impact of increasing energy costs upon the design philosophy of avionic fuel management systems. Volume II: Appendices</td>
</tr>
<tr>
<td>TAYLOR, N. L.</td>
<td>Gas-theoretical method for the synthesis of aircraft control during landing approach</td>
</tr>
</tbody>
</table>
ZAPKOV, B. L.
The effect of temperature-time factors on the metal damage and endurance characteristics of gas-turbine-engine rotor blades

THROTTEN, B. L.
evaluation of a meteorological airborne pulse doppler radar

THROTTEN, B. L.
Low NOx heavy fuel combustor concept program

THROTTEN, B. L.
Numerical stability analysis of a compressor model

THROTTEN, B. L.
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack

Thrust, D. L.
Low NOx heavy fuel combustor concept program

Tian, H.
Calculation of the unsteady loads on the surface of a moving wedge with an incident shock wave

Tian, H.
Flow past a wing with spanwise blowing

Tian, H.
The rectangular wing with semi-infinite span in nonlinear theory

Tian, H.
Node scatterer design for fan noise suppression in two-dimensional ducts

Tian, I.
A color video display technique for flow field surveys

Tian, J.
Zonal stability analysis of a compressor model

Tian, J.
The principles and methods for shaping the wing root regions of a wing-body combination at transonic and lower supersonic speeds

Tian, J.
A method for locating aircraft wing damage by nonlinear vibration analysis

Tian, J.
Exhaust emissions reduction for intermittent combustion aircraft engines

Tian, J.
Advanced model scale real-time system

Tian, J.
Calculation of the unsteady loads on the surface of a moving wedge with an incident shock wave

Tian, J.
Downwash behind a wing with spanwise blowing

Tian, J.
The use of metal finishing in aircraft fuel systems

Tian, J.
Requirements on modern mathematical models of gas turbine engines. I

Tian, C.
Experimental and analytical studies of a model helicopter rotor in hover

Tian, C.
Finite difference modeling of rotor flows including wake effects

Tian, C.
The evolution of display formats for advanced fighters using multimode color CRT displays

Tian, C.
Laminar flow control, 1976 - 1982: A selected
Cryogenic wind tunnels: A selected, annotated bibliography

Development of accelerated fuel-engines qualification procedures methodology, Volume 1

Development of accelerated fuel-engines qualification procedures methodology. Volume 1: Appendices

Magnetic anomalies as a reference for ground-speed and map-matching navigation

The FFA wing body 81 computer program. A panel method for determination of aerodynamic characteristics at subsonic and supersonic speeds

Efficient use of working fluids in aviation hydraulic systems

Problems in the automation of the thermal-stress analysis of flight vehicles

A theoretical study of the impact of aircraft wake vortices on roofs in the final approach area of Dusseldorf airport

Radar simulator for aircraft instruments

Calculations of lightning return stroke electric and magnetic fields above ground

Atmospheric electricity hazards analytical model development and application. Volume 1: Lightning environment modeling

Applications of adaptive control systems

Aircraft wing trailing-edge noise

Scanner imaging systems, aircraft

GTD terrain reflection model applied to ILS glide scope

GTD terrain reflection model with application to ILS glide slope

An experimental study of rectangular and circular thrust augmenting ejectors

Micro-heads-up display

An aerodynamic design and the overall stage analysis of flight vehicles

The effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

An aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine

Airborne lidar measurements of smoke plume distribution, vertical transmission, and particle size

Thrust augmenting ejectors

A planning system for F-16 air-to-surface weapons

Landing-thrust augmenting ejectors

Gas path analysis - A tool for engine condition monitoring

Gas path analysis of commercial aircraft engines

Impact of advanced avionics and munitions technology on ground attack weapons systems in night and adverse weather conditions

Accelerated development and flight evaluation of active control concepts for subsonic transport aircraft. Volume 2: AFF C.G. Simulation and analysis

A planning system for F-16 air-to-surface weapons

Limiting payload deceleration during ground, impact

An aerodynamic design and the overall stage performance of an air-cooled axial-flow turbine

Method for the measurement of elastic deformations of aircraft models in a wind tunnel

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

A study of the effect of the flight vehicle body potential on the characteristics of ion attitude transmitters

A planning system for F-16 air-to-surface weapons
The investigation of aircraft accidents and flight test concept evolution

Planning for noise impact around airports

Gas turbine airflow control for optimum heat recovery

Comparison of low-speed handling qualities in ground-based and in-flight simulator tests

Gas turbine airflow control for optimum heat recovery

Experimental study of the flowfield of an airfoil with deflected spoiler

Planning for noise impact around airports

Flight test concept evolution

The investigation of aircraft accidents and incidents - Some recent national and international developments

Meteorology impact on ATC system design

Nonlinear two-dimensional sail theory

Contact problems involving the flow past an inflated aerofoil

Comparison of boundary layer calculations for the root section of a wing. The September 1979 Amsterdam Workshop test case

Prediction of fatigue crack growth rates under variable loading using a simple crack closure

Data processing at the Global Positioning System master control station

Linear alpha-ray altimeter

Hi-polaric interactions with surface mass transfer. I - Steady flow over a slender wedge wing

Analytical and experimental characterization of the JAS-14/A cartridge actuated initiator for use in aircrew escape system performance evaluation

Engine component retirement for cause

The vibratory behavior of a rotating propeller shaft. Part 4: Vibration tests of a rotating propeller shaft in a rubber stern tube bearing

Hypersonic flow about a wing, based on small perturbation theory

Investigation of the loss of control and spin

The September 1979 Amsterdam Workshop test case
implementation of a VTOL control system during horizon [AIAA 1972-1011]
An analysis of a nonlinear instability in the implementation of a VTOL control system [NASA TR-84-2220] Results of NASA/FAA ground and flight simulation experiments concerning helicopter IFB airworthiness criteria [NASA 1974-23219]
WEBER, J. E.
Airborne Electronic Terrain Map System [AIAA 1974-10771] Corona and antenna effects on the Be-130 mine-sweeping helicopter and Baydint navigation set [NASA 1975-2796]
WEIBI, G.
Midair and near midair collisions on two- and three-dimensional curvilinear flight paths [NASA TR-84-265] A theoretical study of the impact of aircraft wake vortices on roofs in the final approach area of Dusseldorf Airport [DFVLR-IBT-WP-84-01]
WEIBER, G. L.
Consequences of American airline deregulation - Legislative theory in a concrete example [NASA 1975-19947]
WEIBER, K.
NASA research activities in aeropropulsion [NASA TR-85-26506]
WEIBER, T.
The effects of flexibility on the steady-state performance of small ribbon parachute models [AIAA PAPER 1972-2123] Reduces aerodynamic heating effects on boresight error [AIAA 1975-26465]
WEIBERB, W.
Tail versus canard configuration - An aerodynamic comparison with regard to the suitability for future tactical combat aircraft [NASA 1976-06902]
WEIBER, R. A.
Volume research for propulsion systems [NASA 1976-17242]
WEIBER, R. E.
WEIBER, J. L.
Fracture mechanics based modelling of the corrosion fatigue process [NASA TR-85-17344]
WEIBER, L. L.
Avionics systems simulation for the Northrop P/A-1HL aircraft [AIAA 1971-2276]
WEIBER, J. W.
WEIBER, G.
WEIBER, G.
A new method of cooling turbine vanes [NASA 1977-11027]
WEIBER, L.
An experimental investigation of the rotating stall, surge and wake behind the rotor for a single stage axial compressor [NASA 1978-11008]
WEIBER, Y. L.
Beyond the horizon coverage for air navigation/traffic control [NASA 1978-24667]
WEILAND, M.
Design requirements for modern rescue helicopters [NASA 1975-19920]
The armed helicopter in air to air missions [NASA 1979-17158]
WEILAND, T.
Advanced compressor components. Phase 1: 1978 to 1979 [NASA RP-16-01-025]
WEILAND, T.
Functional versus communication structures in modern aeronautic systems [NASA 1979-17092]
WEIKAUS, W.
WEISTEIN, E. A.
A modular automated approach to airfield weather systems
[AD-A109377] p0265 N82-19209

WHITE, B. M.
Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft
[AIAA PAP82-1048] p0497 A82-40417

WHITE, K. D.
Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings
[AIAA PAP82-0689] p0339 A82-30156

WHITE, L. R.
Application of a transonic potential flow code to the static aeroelastic analysis of three-dimensional wings
[AIAA PAP82-03296] p0363 N82-23193

TIME-MARCHING TRANSONIC FLUID SCALES INCLUDING ANGLE-OF-ATTACK EGRS
(AIAA PAP82-0292) p0363 N82-23196

WHITE, N. C.
Spin-tunnel investigation of the powered low-speed longitudinal aerodynamics of the V/STOL tilt rotor research aircraft
[AIAA-PAP82-105956] p0192 A82-16100

WHITE, J. B.
Spin-tunnel investigation of a 1/13-scale model of the NASA AD-1 oblique-wing research aircraft
[AIAA-PAP82-03296] p0252 B82-18183

WHITE, E. M.
Casino main rotor tubular braided
[AD-A105510] p0322 N82-14072

WEITZ, G. F.
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)
[AD-A100585] p0036 N82-20190

WEITZ, N. M.
Current perspectives on emergency spin-recovery systems
[AD-A110226] p0549 A82-43266

WEITZ, R. E.
Lear Fan - The plastic aeroplane arrives
[ALF502 - PLUGGING THE TURBOFAN] p0126 A82-10384

WEITZ, K. D.
Optimal terrain-following control for advanced cruise missiles
[AD-A102286] p0374 N82-21179

WEITZ, M. M.
Categorization of atmospheric turbulence in terms of aircraft response for use in turbulence reports and forecasts
[AD-A100585] p0036 N82-20190

WEITZ, R. E.
Measurements of heat transfer coefficients on gas turbine components. I - Description, analysis and experimental verification of a technique for use in hostile environments
[ASME PAPER 82-GT-174] p0426 A82-35387

WEITZ, G. L.
Measurements of heat transfer coefficients on gas turbine components. II - Application of the technique described in part 1 and comparisons with results from a conventional measuring technique and predictions
[ASME PAPER 82-GT-175] p0426 A82-35380

WEITZ, J. L.
Navy spin evaluation of the A-7 airplane configured with automatic maneuvering flaps
[AD-A100585] p0076 N82-14933

WEITZ, D. L.
Advanced crash survivable flight data recorder and Accident Information Retrieval System (AIRS)
[AD-A100585] p0122 N82-14072

WEITZ, M. M.
Analysis of transient data from aircraft gas turbine engines using AIRS
[AD-A100585] p0403 N82-25189

WEITZ, P. C.
Math modeling for helicopter simulation of low speed, low altitude and steeply descending flight
[NASA CR-166386] p0592 N82-32374

WEITZ, T. L.
An evaluation of helicopter autorotation assist concepts
[AD-A108511] p0253 N82-18196

WEITZ, R. V.
Software features applicable to inertial measurement unit self alignment
[AD-A108511] p0253 N82-18196

WEITZ, J. N.
The Shiryaev sequential probability ratio test for redundancy management
[AIAA 82-1623] p0486 A82-38998
PATENT APPLICATIONS

WILLIAMS, R. H.

Dissipation by a finite strip

WILLIAMS, R. B.

Sea King flight tests pitot-static probe and directional vane instrumentation

[AD-A109427] p0308 A82-20176

Boat probe position error corrections for Sea King Mk 50 flight tests

[AD-A109428] p0304 A82-20177

WILLIAMS, M. B.

Results from tests of three prototype general aviation seats

[NASA-TM-84533] p0613 A82-33733

WILLIAMS, R. B.

SFP/DB titanium LFC porous panel concept

p302 A82-20155

Laminar flow control SFP/88 feasibility demonstration

[NASA-CR-165018] p0322 A82-21532

WILLIAMS, R. C.

Low speed testing of the inlets designed for a tandem-fan Y/STOL airplane

[TRIA PAPER 81-2627] p0156 A82-19210

Low speed testing of the inlets designed for a tandem-fan Y/STOL airplane

[NASA-TM-82728] p0034 A82-11042

WILLIAMS, R. M.

X-wing and the Navy Y/STOL initiative

p0385 A82-33915

WILLIAMS, R. L.

Airframe effects on top-mounted inlet systems for YSTOL fighter aircraft

p0156 A82-19212

WILLIAMS, R. A.

Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from January 1962 to 30 June 1981

[AD-A110560] p0407 A82-25243

WILLIAMS, R. M.

Diffusion bonding in superplastic forming/diffusion bonding

p0222 A82-23754

WILLIS, C. M.

Development and validation of preliminary analytical models for aircraft interior noise prediction

p0444 A82-38077

WILLIS, R. M.

Development potential of Intersatellite Communication (I.C.) aircraft engines for coast to coast applications

[NASA-TP-82869] p0453 A82-26297

WILLIS, L. B.

Programs for the transonic wind tunnel data processing installation. Part 9: Pressure measurement update

[AD-A106271] p0192 A82-16095

Current pressure measuring system in the transonic wind tunnel

[AD-A106272] p0192 A82-16096

Design basis for a new transonic wind tunnel

[AD-A11289] p0527 A82-28311

WILLIS, J. P.

Development of a preloaded hybrid advanced composite wing pivot fairing

p0287 A82-27131

WILLIS, J. J.

Sanctuary radar

p0150 A82-18906

WILLIS, R. S.

A methodology for planning a cost effective engine development

[TRIA PAPER 82-1140] A82-35026

WILLEN, L. C.

Effects of intake geometry on circular pitot intake performance at zero and low forward speeds

p0093 A82-13070

WILLOCK, R. L.

The low temperature properties of aviation fuels

[AIAA PAPER 82-07-68] p0422 A82-35306

WILLIAMS, R. E., W. T.

BPL and EPNL noise duration coefficients for the 747 and T-38 aircraft

[NASA-TM-83214] p0042 A82-11660

WILLIAMS, G. A.

Control optimization, stabilization and computer algorithms for aircraft applications

[NASA-CR-169015] p0461 A82-27009

WILSON, B. M.

Aerodynamic interactions with turbulent jet exhaust planes

p0381 A82-33325

Computation of high Reynolds number internal/external flows

[NASA-TR-84049] p0305 A82-11046

WILTON, R.

Novel metal-ceramic-composite sealing coatings in aircraft engines

p0240 A82-24003

WILSON, D. P.

Automated radome performance evaluation as the Radio Frequency Simulation System /RFS/ facility at WICON

p0281 A82-26471

WILSON, C. L.

TF 102 in-duct combustor noise measurements with a turbine nozzle, volume 1

[NASA-CR-165562-VOL-1] p0309 A82-21031

TF 102 in-duct combustor noise measurements with a turbine nozzle, volume 2


TF 102 in-duct combustor noise measurements with a turbine nozzle, volume 3

[NASA-CR-165562-VOL-3] p0309 A82-21033

WILSON, B. R.

A pulsed contention multiplex system using MR-STD-1553 protocol

[TRIA 81-2271] p0049 A82-13467

WILSON, D. A.

737 graphite-epoxy horizontal stabilizer certification

p0336 A82-30109

WILSON, C.

Detection and display of wind shear and turbulence directional vane instrumentation

p0004 A82-10223

Mechanical and metallurgical considerations in extending the life of turbine blades

p0384 A82-33075

WILSON, J. J.

Advanced turboprop testbed systems study. Volume 1: Testbed program objectives and priorities, drive system and aircraft design studies, evaluation and recommendations and wind tunnel test plans

[NASA-CR-167928-VOL-1] p0591 A82-32370

WILSON, J. E.

A computerized system for the application of fracture tracking data to aircraft management for the C-5A military airlift transport

p0336 A82-30119

WILSON, J. W.

The Joint Airport Weather Studies project

[AIAA PAPER 82-0017] p0114 A82-17734

WILSON, E. C.

Fuel-rich plume combustion

p0258 A82-18349

WILSON, R. J.

Developments to improve the noise and combustion emissions on the Fokker F28 aircraft and its Rolls-Royce RB.182-555 engines. Section 1: Development of the new internal 10-lobe mixer

[PHRI-90601] p0318 A82-21207

WILSON, C.

The ultrasonic inspection of C.F.C. composites

[AD-D-06455] p0214 A82-17513

Terrain model animation

[AD-A107911] p0215 A82-17087

WILSON, R. J.

Flight test experience with high-alpha control system techniques on the F-16 airplane

[AIAA PAPER 81-2505] p0057 A82-13906

WILSON, R. B., R. L.

Aluminum of selected TTOIL concepts for civil transportation mission

[AIAA PAPER 81-2655] p0157 A82-19220

WILSON, E. L.

Dose analysis of high temperature transparent windshields for high performance aircraft


SPF/DB titanium concepts for structural efficiency and BC

p0302 A82-20154

WILSON, L. W.

Development of Army high-energy fuel diesel/turbine-powered surface equipment, phase 2

B-168
Initial experimental research into the response of a turbojet engine compressors to distortion of intake pressure

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion

An aerodynamic design method for transonic axial flow compressor stage

An experimental investigation of leading-edge spanwise blowing
Z

SACHARIAS, L. An experimental and theoretical investigation of the interaction between the engine jet and the surrounding flow field with regard to the pressure drag on afterbodies 0360 882-23158

SACHARIAS, G. L. Pilot/vehicle model analysis of visual and motion cue requirements in flight simulation 0562 882-30838

BADZIE, D. Angle of downwash behind a wing in unsteady flow 0241 882-24970

BAGNACR, V. L. Automation of the synthesis of control in a stationary linear system 0389 882-30466

BAGANSK, F. Russian professor Elie Carafoli - 55 years devotion on modern aeronautics and astronautics [FIP PAPER 82-280] 0583 882-07010

BAGARZCK, B. D. Adaptive fuel control feasibility investigation for helicopter applications [ASME PAPER 82-GT-205] 0427 882-35400

BANHE, M. Low grade fuels for turbo and jet engines 0221 882-23439

BSEK, J. A. Analysis of an ideal-fluid flow past a finite-thickness wing 0165 882-19013

BZSEB, L. A. Antioxidant properties of additives based on higher fatty acids 0548 882-02893

BZHERN, S. R. An asymptotic theory of separated flow past low-aspect-ratio wings 0581 882-46135

BZHERN, T. P. Structural strength of materials and parts of gas turbine engines 0544 882-02653

BZLIS, P. F., SR. Flight testing the nonmetallic spline coupling technology at the Naval Air Test Center [AIAA PAPER 81-2405] 0056 882-13091

BANB, L. E. Fiber-optic immunity to SAS/ERP for military aircraft

[0552 882-13529]

[0030 882-10057]

[0030 882-10058]

[1028 882-18621]

[0388 882-34172]

[0179 882-20769]

[0579 882-45816]

[0583 882-47072]

[0568 882-3119]

[0565 882-31153]

[0403 882-38722]

[0333 882-29829]

[0031 882-10286]

[0267 882-19226]

[0035 882-22392]

[0032 882-34062]

[0032 882-34061]

[0032 882-34060]

[0268 882-33390]

[0055 882-13879]

[0337 882-30142]

[0488 882-39102]

[0477 882-27663]
INTAKE PRESSURE

A preliminary experimental investigation of the response of a turbojet engine to inlet pressure distortion

THE APPLICATION OF PROGRAMMABLE POCKET CALCULATORS FOR COMPUTATIONS DURING SURVEY FLIGHTS

THE APPLICATION OF PROGRAMMABLE POCKET CALCULATORS FOR COMPUTATIONS DURING SURVEY FLIGHTS

INSTRUMENTED AIRCRAFT VERIFICATION OF CLEAR-AIR RADAR DETECTION OF LOW-LEVEL WIND SHEAR

SCANNING STRATEGIES FOR AIR TRAFFIC CONTROL RADARS

CONSIDERATIONS FOR OPTIMUM SITING OF KEIKAD TO DETECT CONVECTIVE PHENOMENA HAZARDOUS TO TERMINAL AIR NAVIGATION, PART I

INSTRUMENTED AIRCRAFT VERIFICATION OF CLEAR-AIR RADAR DETECTION OF LOW-LEVEL WIND SHEAR

SCANNING STRATEGIES FOR AIR TRAFFIC CONTROL RADARS

CONSIDERATIONS FOR OPTIMUM SITING OF KEIKAD TO DETECT CONVECTIVE PHENOMENA HAZARDOUS TO TERMINAL AIR NAVIGATION, PART I

IT'S TOO LOGICAL - IT'LL NEVER WORK /COMMERCIAL APPLICATIONS OF THE J71/

CIVIL HELICOPTER PROPULSION SYSTEM RELIABILITY AND ENGINE MONITORING TECHNOLOGY ASSESSMENTS

COMPONENT RESEARCH FOR FUTURE PROPULSION SYSTEMS

A THEORETICAL ANALYSIS OF THE STREAM SURFACE OF REVOLUTION WITH SUPERSONIC INLET FLOW IN A TRANSSONIC AXIAL COMPRESSOR

STATUS OF THE COSPAR-SABSAI PROJECT AND ITS POSSIBLE OPERATION IN CONJUNCTION WITH INMARSAT SYSTEM

THEORY AND EXPERIMENT IN UNSTEADY AERODYNAMICS

A WIND TUNNEL STUDY OF THE FLUTTER CHARACTERISTICS OF A SUPERCRITICAL WING

AEROELASTIC PROPERTIES OF WINGS IN TRANSSONIC FLOW
Typical Corporate Source Index Listing

A

AAI CORP., COCKEYSVILLE, MD.
Minutes of physical configuration audit for the F-16 Electronic Warfare Training Device
[AGABD-CP-301] p0093 B82-13065

ABERDEEN UNITED, (SCOTLAND).
Application of numerical methods to the calculation of electrostatic fields in aircraft fuel tanks
[AGABD-AG-238] p0202 B82-17160

ADVANCED ENGINEERING LAB., SALISBURY (AUSTRALIA).
Composite flight test boom for Nomad 922B aircraft
[AGABD-AG-238] p0202 B82-17160

ADVOCATE GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT, RESULT-SUB-GEN (FRANCE).
Aircraft excrescence drag
[AGABD-AG-238] p0202 B82-17160

Analysis methods for predicting structural response to projectile impact
[AGABD-AG-238] p0202 B82-17160

Analysis methods for ballistic damage size and type
[AGABD-AG-238] p0202 B82-17160

Damage from high explosive (HE) projectiles
[AGABD-AG-238] p0202 B82-17160

Damage from engine debris projectiles
[AGABD-AG-238] p0202 B82-17160

Hydrodynamic ram damage
[AGABD-AG-238] p0202 B82-17160

Effects of cyclic loading on projectile impact damage
[AGABD-AG-238] p0202 B82-17160

Strength degradation of impact damaged structures
[AGABD-AG-238] p0202 B82-17160

Analysis of multiple load path panels containing impact damage
[AGABD-AG-238] p0202 B82-17160

Through flow calculations in axial turbomachines
[AGABD-AG-238] p0202 B82-17160

Influence of correlations and computational methods on the prediction of overall efficiency
[AGABD-AG-238] p0202 B82-17160

The two stage aero engine turbine
[AGABD-AG-238] p0202 B82-17160

Survey on diffusion factors and profile losses
[AGABD-AG-238] p0202 B82-17160

End-wall boundary layer calculations
[AGABD-AG-238] p0202 B82-17160

Correlation for secondary flows and clearance effects
[AGABD-AG-238] p0202 B82-17160

Effects of Reynolds number and turbulence level on axial cascade performance
[AGABD-AG-238] p0202 B82-17160

Survey on the effect of blade surface roughness on compressor performance
[AGABD-AG-238] p0202 B82-17160

Part span damper loss prediction for transonic axial fan rotors
[AGABD-AG-238] p0202 B82-17160

Deviation/turning angle correlations
[AGABD-AG-238] p0202 B82-17160

Axial compressor stall and surge
[AGABD-AG-238] p0202 B82-17160

Summary of answers to the questionnaire
[AGABD-AG-238] p0202 B82-17160

Single stage transonic compressor and equivalent plane cascade
[AGABD-AG-238] p0202 B82-17160

Results of calculations
[AGABD-AG-238] p0202 B82-17160

The through flow calculations
[AGABD-AG-238] p0202 B82-17160

Evaluation of profile loss predictions based on diffusion factors
[AGABD-AG-238] p0202 B82-17160

Axial-flow turbomachine through flow calculation methods
[AGABD-AG-238] p0202 B82-17160

Blade-to-blade computations and boundary layer corrections in axial compressors and turbines
[AGABD-AG-238] p0202 B82-17160

Helicopter Propulsion Systems
[AGABD-AG-238] p0202 B82-17160

Maintenance training simulator design and acquisition: ISD-derived training equipment design
[AD-A110871] p0487 H82-26221

Maintenance training simulator design and acquisition: Handbook of ISD procedures for design and documentation
[AD-A110900] p0457 H82-26321

Argonne National Lab., Ill.

Heavy-duty engines analysis, study 4: A preliminary market analysis for gas-turbine applications in the farm market
[DE82-001758] p0308 H82-20599

AIRC Research Corp., Annapolis, Md.

The use of flight management computers in air carrier operations in the 1980s
[AD-A110471] p0132 H82-14071

Impact of technology on avionics cost trends
[AD-A110472] p0256 H82-18219

Improvement program for the C-141 Navigation Selector Panel
[AD-A111470] p0408 H82-25248

Electronic warfare avionics Integration Support Facility support processor
[AD-A111547] p0408 H82-25249

Life-cycle-cost analysis of the microwave landing system ground and airborne systems
[AD-A110909] p0489 H82-26266

Cost analysis of the discrete address Beacon System for the low-performance general aviation aircraft community
[AD-A110927] p0523 H82-28274

Reliability, Availability, Maintainability Data Tracking Plan improved GUARDIAN
[AD-A110931] p0608 H82-33378

Development of avionics installation interface standards
[AD-A110943] p0608 H82-33384

AIRC Research Corp., Santa Ana, Calif.

Technology overview for advanced aircraft armament system program
[AD-A107680] p0201 H82-17155

Standardization study for advanced aircraft armament system program
[AD-A107681] p0201 H82-17156

Arizona State Univ., Tempe.

Wind tunnel measurements of three-dimensional wake of buildings
[NASA-CR-1706] p0461 H82-26521

Arizona Univ., Tucson.

Analysis of flight test measurements in ground effect
[AD-A110391] p0170 H82-20763

Subcritical and supercritical airfoils for given pressure distribution
[AD-A110413] p0085 H82-12031

Design of a catadioptric VCAS helmet-mounted display
[AD-A110392] p0465 H82-25040

Surface generation for aerodynamic applications
[AD-A110401] p0465 H82-25041

An effective algorithms for shock-free wing design
[AD-A110415] p0563 H82-31322

Army Aeronautical Research Lab., Fort Belvoir, Va.

Vibration levels in Army helicopters: Measurement recommendations and data
[AD-A110213] p0255 H82-18209

Human response to fire
[AD-A110214] p0526 H82-29281

Army Aviation Research and Development Command, Dover, N. J.

Digital image processing for acquisition, tracking, hand-off and rangirg
[AD-A110215] p0671 H82-27303

Universal turret system model determination and controller performance testing
[AD-A1117867] p0608 H82-33380

Army Aviation Research and Development Command, Watervilet, N. Y.

C-5A operational utility evaluation soil tests and analysis
[AD-A110550] p0133 H82-14083

Stress intensity factors for radial cracks at outer surface of a partially autofrettaged cylinder subjected to internal pressure
BALLISTIC RESEARCH LABS., ABERDEEN PROVING GROUND, MD.

Kinesics investigation Hughes Helicopter 7.62mm chain gun
[AD-11136] p0528 882-23087

BATTLE CITIES LAB., BOISE, IDAHO, CO.,  BDSHIS

NASA environment safety report project
[BASA-CB-165679] p0140 882-15025

BEECH AIRCRAFT CORP., WICHITA, KANSAS

Advanced general aviation engine/airframe
integration study
[BASA-CB-165655] p0354 882-22268

BELL HELICOPTER CO., FORT WORTH, TEX.

Civil helicopter propulsion system reliability and
electric monitoring technology assessments
Investigation of correlation between full-scale
and fifth-scale wind tunnel tests of a Bell
helicopter Textron Model 222
[BASA-CB-165627] p0535 882-29315

BENDIX CORP., WESTBOURNE, N. J.

Methodology for measurement of fault latency in
digital avionic minicomputer
[BASA-CB-165626] p0196 882-17105

SIFT: An ultra-reliable avionic computing system
[BASA-CB-165617] p0197 882-19115

BUELL APPLIED RESEARCH, INC., JERSEY, N. J.

Analysis of rotary balance data for the F-15
airplane including the effect of conformal fuel tanks
[BASA-CB-35479] p0369 882-22213
P-15 rotary balance data for an angle-of-attack
range of 8 deg to 90 deg
[BASA-CB-35480] p0369 882-22213
Rotation balance data for an F-15 model with
conformal fuel tanks for an angle-of-attack
range of 8 deg to 90 deg
[BASA-CB-35416] p0393 882-29169

BODENBAUER HABERFELS, T. E.

A redundancy concept for a digital CSAS
[BASA-CB-165656] p0251 882-18170

Practical design and realization of a digital
adaptive flight control system
[BASA-CB-165649] p0039 882-11079

BOXING AEROSPACE CO., HOUSTON, TEX.

A system safety model for developmental aircraft
project
[BASA-CB-3535] p0350 882-22228

BOXING AEROSPACE CO., KENT, WASH.

A study of flight control requirements for advanced,
winged, earth-to-orbit vehicles with
far-saf center-of-gravity locations
[BASA-CB-3491] p0267 882-19226

BOXING AEROSPACE CO., SEATTLE, WASH.

Feasibility study of a 2700V dc flat cable
aircraft electrical power distributed system
[AD-A05730] p0357 882-20252

BOXING CO., SEATTLE, WASH.

The outlook for advanced transport aircraft
[BASA-CB-165641] p0181 882-21374

Transonic perturbation analysis of
working-tunnel-airfoil-pylon configurations
with powered jet exhausts
[BASA-CB-165643] p0184 882-22077

BARTWOOD C. S. C., A. J.

Selected advanced aerodynamic and active control
concepts development
[BASA-CB-3220] p0161 882-15033

Surface flow visualization requirements for
testing in WIP
[BASA-CB-165649] p0596 882-32667

BARTWOOD C. S. C., A. J.

Transonic applications of the Wake Imaging System
[BASA-CB-165649] p0597 882-26276

BARTWOOD C. S. C., A. J.

Airframe surface coatings for drag
reduction/erosion protection
[BASA-CB-165643] p0233 882-29401

BARTWOOD C. S. C., A. J.

A large-scale investigation of engine influence
on inlet performance at angle-of-attack
[BASA-CB-165643] p0234 882-29401

Transonic wind tunnel test of a supersonic
data installation
[BASA-CB-165643] p0235 882-13339

BARTWOOD C. S. C., A. J.

A large-scale investigation of engine influence
on inlet performance at angle-of-attack
[BASA-CB-165643] p0234 882-29401

Transonic wind tunnel test of a supersonic
inlet data installation
[BASA-CB-165643] p0235 882-13339

BARTWOOD C. S. C., A. J.

In-service inspection methods for graphite-epoxy
structures on commercial transport aircraft
[BASA-CB-165641] p0437 882-37677

BARTWOOD C. S. C., A. J.

Airframe-propulsion system aerodynamic
interference predictions at high transonic
numbers including off-design engine
airflow effects
[BASA-CB-165649] p0997 882-13058

Airborne data analysis/monitor systems
[BASA-CB-165649] p0138 882-14830

Airborne data analysis/monitor systems
[BASA-CB-165649] p0138 882-14830

Development of an active control for
aerospace vehicle (AVS) technology to an advanced
subsonic transport project. Initial ACT configuration
design study
[BASA-CB-159287] p0583 882-32379

Development and evaluation of new commercial
cost and benefits design optimization model for
fault tolerant flight control system
[BASA-CB-165649] p0583 882-32379

Development and evaluation of new commercial
cost and benefits design optimization model for
fault tolerant flight control system
[BASA-CB-165649] p0583 882-32379

Development and evaluation of new commercial
cost and benefits design optimization model for
fault tolerant flight control system
[BASA-CB-165649] p0583 882-32379

Development of an active control for
aerospace vehicle (AVS) technology to an advanced
subsonic transport project. Initial ACT configuration
design study
[BASA-CB-165649] p0583 882-32379

Development of an active control for
aerospace vehicle (AVS) technology to an advanced
subsonic transport project. Initial ACT configuration
design study
[BASA-CB-165649] p0583 882-32379

Integrated application of active controls (IAAC)
technology to an advanced subsonic transport
project. Conventional baseline configuration study
[BASA-CB-159278] p0593 882-32378

Environmental exposure effects on composite
materials for commercial aircraft
[BASA-CB-165649] p0594 882-32421

Protection against the effects of high
transonic aerodynamic and flight control loads
[BASA-CB-165649] p0595 882-32421

Protection against the effects of high
transonic aerodynamic and flight control loads
[BASA-CB-165649] p0595 882-32421

Protection against the effects of high
transonic aerodynamic and flight control loads
[BASA-CB-165649] p0595 882-32421

Protection against the effects of high
transonic aerodynamic and flight control loads
[BASA-CB-165649] p0595 882-32421
Field test of an in stack diffusion classifier
Implementation of the recommendations made on cooled variable-area radial turbine technology
Study of fiber optics to enhance an experimental and analytical studies of advanced development of an efficient procedure for finite volume calculation of three-dimensional calculations of lightning return stroke electric potential reductions in aircraft operation and maintenance costs by using thrust computing support equipment
Opportunities exist to achieve greater standardization of aircraft and helicopter seats Havy's F/A-18 expected to be an effective mission effectiveness of the AV-8B Harrier 2 could be improved if actions are taken now Opportunities to reduce the cost of some B-52 modifications
Reduced performance and increased cost warrant reassessment of the multiple stores ejector rack
Onboard computer outages at air terminal facilities and their correlation to near misses mid-air collisions (AFMD-82-40)
Aircraft thrust/power management can save defense fuel, reduce engine maintenance costs and improve readiness
Effects of vane/blade ratio and spacing on fan
FAA misses opportunities to discontinue or reduce operating hours of some airport traffic control towers
Botor technology for electric remotely Piloted Vehicle (RFV)
Electronic master monitor and advisory display System (EMUADS)
Fly-by-wire systems, human engineering summary report
Aircraft thrust/power management can save defense fuel, reduce engine maintenance costs and improve readiness
Study of advanced propulsion systems for Small Transport Aircraft Technology (STAT) program
Ceramic gas turbine engine demonstration program
GALILEO BLBCIBO-OPTICS CO., STOBBRID6B, BASS.
Florida Institute of Tech., C-16
C-16
heat transfer. Volume 1: Description of experimental hardware and test conditions
[AD-A110332] p0317 N82-21199
Acoustically induced vibration
[AD-A110093] p0355 N82-26306
GENERAL TECHNOLOGY APPLICATIONS, INC., ALEXANDRIA, VA.
Investigation of the application of a cryogenic blending process to produce antimisting diesel fuels
[AD-A110917] p0411 N82-25399
GEORGE WASHINGTON UNIV., WASHINGTON, D.C.
Transonic wind tunnel wall interference corrections for three-dimensional models
[AD-A105858] p0237 N82-24663
Experimental trim drag values for conventional and supercritical wings
[NASA-CR-168500] p0198 N82-17126
GEORGETOWN UNIV., WASHINGTON, D.C.
Fracture and fatigue characterization of aircraft structural materials under biaxial loading
[AD-A109054] p0269 N82-19587

GEORGIA INST. OF TECH., ATLANTA
An iterative finite element-technique for predicting sound radiation from turbofan inlets in steady flight
[AD-A105846] p0115 N82-17796
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[NASA-CR-165120] p0265 N82-26620
Evaluation of an asymptotic method for helicopter rotor performance
[AD-A110549] p0499 N82-40509
Prediction of sound radiation from different practical jet engine inlets
[NASA-CR-165120] p0195 N82-16810
Distributed data processing: What is it?
[AD-A110862] p0394 N82-24188
Marine Air Traffic Control and Landing System
[AD-A110907] p0394 N82-24188
Development of an analytical technique for the optimization of jet engine and duct acoustic properties
[NASA-CR-169002] p0409 N82-25256
Acoustic properties of turbofan inlets
[NASA-CR-169016] p0562 N82-27090
Marine Air Traffic Control and Landing System
[AD-A110907] p0349 N82-25256
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[NASA-CR-165311] p0523 N82-26282
Community noise
[AD-A110907] p0565 N82-31072
Survey of community technology needs
[NASA-CR-165311] p0565 N82-31072
Development of a spinning wave heat engine
[NASA-CR-165611] p0570 N82-31328
Helicopter vibration suppression using simple pendulum absorbers on the rotor blade
[NASA-CR-3619] p0563 N82-33734
GOODYEAR AEROSPACE CORP., AKRON, OHIO.
Dynamic stability of a buoyant quad-rotor aircraft
[AD-A102307] p0117 N82-17061
Performance characteristics of a buoyant quad-rotor research aircraft
[AD-A11032] p0513 N82-40974
Study of ground handling characteristics of a maritime patrol airship
[NASA-CR-166253] p0191 N82-16090
Preliminary design study of a hybrid airship for flight research
[NASA-CR-166246] p0201 N82-17152
Preliminary study of ground handling characteristics of a saz:an Quad Motor (RQM) vehicles
[NASA-CR-166130] p0567 N82-26220

Goulding (Herbell L.) and ASSOCIATES, GLENDALE, CALIF.
Study of the de-icing properties of the AS08-3 rotorcone
[AD-A110405] p0570 N82-31335
Design of high integrity multivariable control systems

Numerical aircraft design using 3-D transonic and induced effects on a V/STOL vehicle design.

Analysis with optimization, volume 2. Part 1: User's guide to transport design computer program

Accuracy of stereographies for fire control

Overview of Honeywell electromechanical actuation programs

Development of a taped random vibration technique for acceptance testing

Test and evaluation of 0V fiber optics for structural survivability

Closed-form solutions of supersonic wing-body interference

The need for multivariable design and analysis techniques

Limitations on achievable performance of multivariable feedback systems

LQG-based multivariable design: Frequency domain interpretation

LQG multivariable design tools

Assessment of stereographies for fire control and navigation in fighter aircraft

Honeywell Systems and Research Center, Minneapolis, Minn.

Robust Kalman filter design for active flutter suppression systems

Self-tuning regulator design for adaptive control of aircraft wing/store flutter

Robust multivariable design techniques based on singular value generalizations of classical control

Design techniques for multivariable flight control systems

Integrated control design techniques

Computer image generation: Advanced visual/sensor simulation

A comprehensive bibliography of literature on helicopter noise technology

Optimal periodic Dolphin gliding flight

Optimal dolphin hang gliding flight

Accurate numerical solution of compressible, transonic flow about a supersonic wing with/without mnglet

Optimal periodic gliding flight

Overview of Honeywell electromechanical actuation programs

Analysis with optimization, volume 3. Part 2: Analysis of results

Analysis with optimization, volume 3. Part 1: Experimental technique

Closed-form solutions of supersonic wing-body interference

Test and evaluation of VF fiber optics for
Calculation of sensitivity derivatives in the effect of aspect ratio on the unsteady aerodynamic forces induced by vibration of a cascade blade
Instituto de Pesquisas Espaciais, São José dos Campos (Brazil)

An onboard supervisory system for applications in space missions

Frelaunke estimates of near Earth satellite lifetimes using quasi-dynamic atmosphere models - application to a proposed Brazilian satellite

Investigation into the utility of some quick-setting concrete mixtures for runway repair

Development of a simple, self-contained flight data acquisition system

The use of differential pressure feedback in an automatic flight control system

JET Propulsion Lab., California Inst. of Tech., Pasadena

Biological behavior of progressively shear-thickening solutions

Experimental investigation of turbulent wall-jets in the presence of adverse pressure gradients in a rectangular diffuser

Synthetic aperture radar target simulator

Vehicle test report: Batiractic pickup track

Global positioning system timing receivers in the DSB

JOINT INST. FOR ADVANCEMENT OF FLIGHT SCIENCES, HAMPTON, VA.

Determination of airplane aerodynamic parameters from flight data at high angles of attack

JOINT PUBLICATIONS RESEARCH SERVICE, ARLINGTON, VA.

German-Argentine experiment: Vertical-rotor wind engine

Airbus A-310 will compete with Boeing 767 for market

KAAN AEROSPACE CORP., BLOOMFIELD, CONN.

General purpose research rotor

Advanced technology lightweight gondola system

Development of manufacturing technology for fabrication of a composite helicopter main rotor spar by tubular braiding

System identification technology verification

Dynamic System Coupling (DISCO) program. Volume 1: Theoretical manual

Dynamic System Coupling (DISCO) program. Volume 2: Theoretical manual

KANSAS DEPT., LAWRENCE

Development of a simple, self-contained flight test data acquisition system

A simple, low cost application of a flight test parameter identification system

Effects of vortex breakdown on longitudinal and lateral-directional aerodynamics of slender wings by the suction analogy

Design and flight testing of a digital optimal control general aviation autopilot

The design integration of wingtip devices for light general aviation aircraft

KANSAS UNIV. CENTER FOR RESEARCH, INC., LAWRENCE

The use of differential pressure feedback in an automatic flight control system

Icing tunnel tests of a composite porson leading edge for use with a liquid anti-ice system

A theoretical investigation of wing rocking

A program to evaluate a control system based on feedback of aerodynamic pressure differentials

Development of a simple, self-contained flight test data acquisition system

Study of noise reduction characteristics of composite fiber-reinforced panels, interior panel configurations, and the application of the tuned damper concept

Development of a simple, self-contained flight test data acquisition system

A research program to reduce interior noise in general aviation airplanes. Influence of decompensation and damping material on the noise reduction characteristics of flat and curved stiffened panels

C-20
CORPORATE SOURCEx INDEX

KENYON INTERNATIONAL, INC., HAMPTON, VA.
Allocation of the subsonic pitch-up of delta wings
[AD-A110406] p0183 882-22052
Design considerations and experiences in the use of composite material for an aerelastic research wing
[AD-A110012] p0338 882-30146
Observations and implications of natural laminar flow on practical airplane surfaces
[AD-A110011] p0805 882-40693
Program for narrow-band analysis of aircraft flyover noise using ensemble averaging techniques
[ISA-C5-165807] p0358 882-22949
KLE ROYAL DUTCH AIRLINES, AMSTERDAM (NETHERLANDS)
- Design and maintenance against corrosion of aircraft structures
[AD-A110101] p0211 882-17356
Maintenance experience with civil aero engines
[IS-A110525] p0345 882-22176

KOH (RICHARD L.), SEATTLE, WA.
High pressure bleed for STOL and STOVL performance: A conceptual examination
[AD-A110526] p0950 882-32357
KYN, INC., JERSEY CITY, N.J.
Baseline data on utilization of low-grade fuels in gas turbine applications. Volume 2: Emissions evaluation
[ISA-81-903764] p0031 882-10254
KYUSHU UNIV., FUKUOKA (JAPAN)
Effect of mean blade loading on supersonic cascade flutter
[AD-A110101] p0143 882-15059

LAR, INC., GRAND RAPIDS, MICH.
Integrated flight trajectory control
[AD-A110995] p0456 882-26319
LAR SINGLET, INC., GRAND RAPIDS, MICH.
Flight trajectory control investigation
[AD-A110542] p0035 882-11048
LAR SINGLET, INC., SAINT ROCHE, CALIF.
Development and evaluation of automatic landing control laws for light wing loading STOL aircraft
[ISA-C5-166160] p0028 882-10043
LEIGH INSTRUMENTS LTD., CARLETON PLACE (ONTARIO)
Effectiveness of survivability and recoverability of flight data recorders
[AD-A110101] p0902 882-25188

LIGHTNING AND TRANSIENTS RESEARCH INST., KELLSBOURG, P.L.
Atmospheric electricity hazards analytical model development and applications. Volume 2: Simulation of the lightning/aircraft interaction event
[AD-A11010} p0540 882-29601
LEICON LAB., BASIC INST. OF YELM, LEONINTON
ATCPSR uplink environment measurement near Jacksonville, Florida
[AD-A110543] p0188 882-16063
A model for sensor-interceptor trade-off analysis
[AD-A110463] p0450 882-26721
Application of adaptive estimation to target tracking
[AD-A110236] p0450 882-26722
A comparative study of narrowband vocoder algorithms in an Air Force operational environments using the Diagnostic Rhino Test
[AD-A110253] p0460 882-26566
Boeing target detector (Mod 2)
[AD-A110409] p0539 882-29520
Remote sensing of turbine engine gases
[AD-A110545] p0559 882-30310
L-band DBE multipath environment in the Microwave Landing System (MLS) approach and landing region
[FAA-AD-82-19] p0585 882-32330
LITTLE (ARTHUR L.), INC., CAMBRIDGE, MASS.
An assessment of the crash fire hazard of liquid hydrogen fueled aircraft
[ISA-C5-165526] p0263 882-19196
LITTON SYSTEMS (CANADA) LTD., TORONTO (ONTARIO)
The multi mode matrix flat panel display: Technology and applications
[AD-A110406] p0251 882-18169

LOCKEED-GEORGIA CO., HARRISTT.
LITTON ELECTRICAL RESEARCH, FREIBOURG (WEST GERMANY)
Reconfiguration: A method to improve system reliability
[AD-A110547] p0197 882-17107
LOCKEED AIRCRAFT CORP., BURBANK, CALIF.
Aircraft alerting systems standardization study. Phase 4: Accident implications on systems design
[AD-A110762] p0609 882-33388
LOCKEED AIRCRAFT SERVICES, INC., OSAKA, JAPAN
Flight data recovery under adverse conditions
[AD-A110401] p0402 882-25183
LOCKEED-CALIFORNIA CO., BURBANK.
Soonic fatigue testing of an advanced composite aileron
[AD-A110541] p0283 882-26567
Interior noise considerations for advanced high-speed turboprop aircraft
[AD-A110221] p0416 882-35010
Modal control of related static stability aircraft
[AD-A110222] p0404 882-30944
Experimental study of fuel heating at low temperatures in a wing tank model, volume 1
[AD-A110542] p0404 882-11224
Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 1: Load alleviation/extended span development and flight tests
[ISA-C5-159007] p0145 882-15076
Accelerated development and flight evaluation of active controls concepts for subsonic transport aircraft. Volume 2: APT C.G. simulation and analysis
[ISA-C5-159008] p0145 882-15077
System study of transport aircraft incorporating advanced aluminum alloys
[ISA-C5-165820] p0201 882-17153
Electric flight systems, overview
[AD-A110545] p0260 882-19135
Flight service evaluation of Kevlar-49 epoxy composite panels in wide-bodied commercial transport aircraft
[AD-A110543] p0357 882-22316
Transport aircraft crash dynamics
[ISA-C5-165851] p0394 882-24186
Electronic/electric technology benefits study
[ISA-C5-165890] p0521 882-28243
Additional experiments on flowability improvements of aviation fuels at low temperatures, volume 2
[ISA-C5-167512] p0571 882-31046
LOCKEED CORP., BURBANK, CALIF.
Development and flight test evaluation of a pitch stability augmentation system for a relaxed stability L-1011
[AD-A110542] p0497 882-39004
LOCKEED ENGINEERING AND MANAGEMENT SERVICES CO., INC., HOBOKEN, N.J.
Electrovascular Activity/Air Traffic Control (EV/A/ATC) test report
[AD-A110547] p0370 882-23381
Photointerpretation key for pine regeneration analysis using high-altitude color infrared panoramic photography
[PB82-224404] p0562 882-30616
High-altitude imagery user guide
[PB82-158553] p0562 882-30608
LOCKEED-GEORGIA CO., HARISTT.
Multibody transport concept
[AD-A110545] p0376 882-31983
Turbooprop cargo aircraft systems study
[AD-A110547] p0376 882-31983
Analytical study of cockpit information requirements
[AD-A108528] p0256 882-18218
Numerical aircraft design using 3-D transonic analysis with optimization. Volume 1: Executive summary
[AD-A110035] p0314 882-21180
Numerical aircraft design using 3-D transonic analysis with optimization, volume 2. Part 1: Transport design
[AD-A110231] p0315 882-21181
Numerical aircraft design using 3-D transonic analysis with optimization, volume 2. Part 2: Fighter design
[AD-A110036] p0315 882-21182

C-21
CORPORATE SOURCE INDEX

CONTRACTOR \n
M

AER-AcouSTICS AND NOISE, INC., SEATTLE, WASH.
A study of general aviation community noise
impact and annoyance
[AIAA 82-01067] p0068 B82-31066

ALACON AVIONICS LTD., ROCHESTER (ENGLAND).
Wide angle raster head up display design and
application to future single seat fighters
[AIAA 82-02704] p0062 B82-27009

BARTZ AIRCRAFT, ORLANDO, FLA.
Helicopter night vision system simulation
evaluation
[AD-A110465] p0063 B82-26292

BARTZ AIRCRAFT, ORLANDO, FLA.
Definition of display/control requirements for
assault transport night/adverse weather
capability
[AD-A110465] p0063 B82-23217

BARTZ AIRCRAFT, ORLANDO, FLA.
Outsider's look at flight instrumentation
[AD-A108857] p0064 B82-23247

BARTZ AIRCRAFT, ORLANDO, FLA.
Depot support of gas turbine engines
[AD-A109900] p0046 B82-27217

BARTZ AIRCRAFT, ORLANDO, FLA.
Aeroacoustic theory for noncompact wing-gust
interaction
[ADB-81-67.7] p0038 B82-11071

BARTZ AIRCRAFT, ORLANDO, FLA.
Roll up model for rotor wake vortices, part 5
[AIAA PAPEB 82-1001] p0038 B82-19798

BARTZ AIRCRAFT, ORLANDO, FLA.
Definition of display/control requirements for
assault transport night/adverse weather
capability
[AD-A110465] p0063 B82-23217

BARTZ AIRCRAFT, ORLANDO, FLA.
Outsider's look at flight instrumentation
[AD-A108857] p0064 B82-23247

BARTZ AIRCRAFT, ORLANDO, FLA.
Aeroacoustic theory for noncompact wing-gust
interaction
[ADB-81-67.7] p0038 B82-11071

BARTZ AIRCRAFT, ORLANDO, FLA.
Roll up model for rotor wake vortices, part 5
[AIAA PAPEB 82-1001] p0038 B82-19798

BARTZ AIRCRAFT, ORLANDO, FLA.
A simplified approach to the free wake analysis
of a hovering rotor
[AD-A108857] p0046 B82-18121

BARTZ AIRCRAFT, ORLANDO, FLA.
A simplified approach to the free wake analysis
of a hovering rotor
[AD-A108857] p0046 B82-18121

BARTZ AIRCRAFT, ORLANDO, FLA.
Experimental methods for the prediction of the
effect of viscosity on propeller performance
[AD-A109886] p0038 B82-20472

BARTZ AIRCRAFT, ORLANDO, FLA.
Application of Computational Fluid Dynamics
(CFD) in transonic wind-tunnel/flight-test
correlation
[ADB-81-67.7] p0038 B82-25211

BARTZ AIRCRAFT, ORLANDO, FLA.
PPPD Programmable pilot-oriented display
system
[ADB-81-67.7] p0038 B82-25211

BARTZ AIRCRAFT, ORLANDO, FLA.
The P-POD Project
[ADB-81-67.7] p0038 B82-25211

BARTZ AIRCRAFT, ORLANDO, FLA.
Vacuum ice prevention
[ADB-81-67.7] p0038 B82-25211

BARTZ AIRCRAFT, ORLANDO, FLA.
Heat transfer in turbines
[AD-A111004] p0055 B82-26307

BARTZ AIRCRAFT, ORLANDO, FLA.
Lateral control system design for VTOL landing
on a D26C in high sea states
[ADB-81-67.7] p0038 B82-20472

BARTZ AIRCRAFT, ORLANDO, FLA.
Control optimization, stabilization, and computer
algorithms for aircraft applications
[ADB-81-67.7] p0038 B82-20472

BARTZ AIRCRAFT, ORLANDO, FLA.
The cost of noise reduction for departure and
arrival operations of commercial tilt rotor
[ADB-81-67.7] p0038 B82-20472
Factors influencing velocity distributions at
The modeling and prediction of multiple jet VIOL
Corrosion control test method for avionic
P/A-I8A tactical airborne computational subsystem
F/A 18 Hornet crev station
The design of a wind tunnel VSTOL fighter model
The interaction of radio frequency
Aircraft alerting systems standardization study.
Evaluation of direct force mode fighters by
Developaent of vibration qualification test
A study to define the research and technology
Tests and analysis of a vented 0 thrust
Source assessment system
Advanced trending analysis/EDS data program
Assessment of lightning simulation test
determination from flight tests, phase 2
Determination from flight tests, phase 1
The problem of calculation of the flow around
for helicopter rotohers
The problem of calculation of the flow around
feedback and minimal sensitivity
The armed helicopter in air to air missions
Investigations of the separation behavior on
Theoretical investigations on the influence of
different strake, tail unit, and conventional

C-23
Influence of strakes on coefficients of
Calculation of the cross section properties and
Program presentation of the working group
Controls and displays for all-weather operation
Bational production methods for the manufacture
Hew developments in the field of ramjet missile
Experience with high performance T/SIOL fighter
Besearch and development at HBB. Technical and
Computer generated images for aircraft pilot
Theoretical and experimental investigations of
Dynamic response of a hot gas, control-surface
Vibration qualification of external aircraft
A hingeless tail rotor of fiber composite
aerodynamics project. Significance and
Electroforming of space and aircraft structures
The problem of calculation of the flow around
ACTT1: Investigation of new piloting and flight
Theoretical linear approach to the combined
Integration of couple* systems in current and
Interpretation and constraction of t dynamic
Active gust and maneuver load control concepts
separated flow: Problems with rotary wings
[BBB-OD-303-81-0] p0527 H82-28356
Development of materials and manufacturing
technology over the next 20 years: Composite
[BBB-OD-341-82-0] p0527 H82-28365
Hew developments in the field of ramjet missile
[BBB-OD-324-81-0] p0410 H82-25383
Carbon fiber reinforced composite structures
protected with metal surfaces against
lightning strike damage
[BBB-OD-360-82-0] p0527 H82-28364
Development of materials and manufacturing
technology over the next 20 years: Composite
[BBB-OD-341-82-0] p0527 H82-28365
Helicopter vibration control: A survey
[BBB-OD-302-80-0] p0315 H82-21185
Investigations of helicopter structural dynamics
and a comparison with ground vibration tests
[BBB-OD-303-80-0] p0315 H82-21186
NGA RESEARCH CORP., BUFFALO, N.Y.
Test site instrumentation study. Volume 2:
Crash 1 and crash 2 raw data
[BBB-45610] p0258 H82-18233
KICHEGAN STATE UNIV., EAST LANSING,
Forecasting corrosion damage and maintenance
[BBB-OD-311-80-0] p0316 B82-23137
KICHEGAN TECHNOLOGICAL UNIV., HOLLAND,
System optimization by periodic control
[AD-A117815] p0611 H82-33402
MIDDLE EAST TECHNICAL UNIV., KNEBA (TURKEY)
Some observations on the corrosion of aircraft
at the air force base in Bandirs, Turkey
[BBB-OD-310-82-0] p0251 H82-17353
OLDEST RESEARCH INST., GOLDEN, COLO.
Towing of wind turbines with blade cyclic-pitch
variation
[DE-0126639] p0661 H82-26622
KLEXITY OF DEFENCE, BOMB (WEST GERMANY)
Future requirements for helicopter propulsion
systems
[BBB-OD-310-82-0] p0209 H82-17225
KLEXITY OF DEFENCE, LONDON (ENGLAND)
Future technology and requirements for
helicopter engines
[BBB-OD-310-82-0] p0207 H82-17207
Military maintenance policies and procedures for
high-temperature parts. Will they be adequate?
[BBB-OD-310-82-0] p0345 H82-22173
KLEXITY OF THE ENVIRONMENT, OTTAWA (ONTARIO)
Transportation noise, its impact, planning and
regulation
[S-258] p0478 H82-27664
KINESIS UNIV., MINNEAPOLIS,
Robust Kalman filter design for active flutter
suppression systems
[BBB-OD-310-82-0] p0682 H82-38442
KINESIS UNIV., ALEXANDRIA, VA.
A-7 flight software analysis
[AD-A116179] p0212 H82-32286
KINESIS UNIV., ALEXANDRIA, VA.
Determination of noise and vibration parameters
of a large aircraft
[BBB-OD-310-82-0] p0177 H82-20759
AIR CORP., MCLEAN, VA.
Requirements for instrument approaches to triple
[BBB-OD-310-82-0] p0132 H82-14079
AIR CORP., MCLEAN, VA.
Requirements for independent and dependent
parallel instrument approaches at reduced
runway spacing
[AD-A105673] p0132 H82-14080
AIR CORP., MCLEAN, VA.
New requirements for instrument approaches to
converging runways
[AD-A105676] p0200 H82-17144
AIR CORP., MCLEAN, VA.
Survey of 101 US airports for new multiple
instrument approach concepts
[AD-A108712] p0209 H82-17229
AIR CORP., MCLEAN, VA.
Active Beacon Collision Avoidance System (BCAS)
logic performance during operational flight
[AD-A108993] p0264 H82-19203
AIR CORP., MCLEAN, VA.
A concept for a fuel efficient flight planning
aid for general aviation
[WA4-3534] p0266 H82-19217
AIR CORP., MCLEAN, VA.
Preliminary functional description of integrated
flow management
Integration of energy management concepts into component design and development for future applications.

Overview of the bare blade configuration.

Repair and regeneration of turbine blades, vanes and discs.

Comparison of different nozzle concepts for a reheated turbine.

Advanced compressor components. Phase II: 1978 to 1979

Advanced component development design basis for next generation medium power helicopter engines.

Regenerative helicopter engine: Advances in performance and expected development problems.

Component design and development for future helicopter engines.

Repair and regeneration of turbine blades, vanes and discs.

Aircraft noise on the equilibrium of airport residents: Testing and utilization of a new methodology.

System for acquisition and analysis of dynamic tests on air intakes.

Experimental investigation of a transonic potential flow around a symmetric airfoil.

Wind tunnel tests of engine-equipped models: Comparison of two jet wash simulation methods.

Taking into account nighttime annoyance in the calculation of the psychic index.

Index to NASA News Releases and Speeches, 1980.

Aircraft noise on the equilibrium of airport residents: Supplementary analyses to the study carried out around Orly airport.

Aircraft noise on the equilibrium of airport residents: Testing and utilization of a new methodology.
National Aeronautics and Space Administration

Flow and pressure field of a model propeller

Gyro aircraft construction: The G 110 Elmean

Composite materials: Tomorrow for the day after tomorrow

Extracts from Problems of Air Law, a collection of works from the Section of Air Law of the Aviation Society of the USSR and Aviation RSFSR

AIAA Paper 81-31147

AIAA Paper 81-31153

Aeronautics and space report of the President: 1981 activities

AIAA Paper 82-3332

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, NASA

RESEARCH CENTER, HOFFSTT FIELD, CALIF.

Proper installation aerodynamics of a supercritical swept wing transport configuration

AIAA Paper 81-1563

Darboux point in incompressible aircraft landing problems

AIAA Paper 82-13077

Air-to-air combat analysis - Review of differential-gaming approaches

AIAA Paper 82-13115

The design of exact nonlinear model followers

AIAA Paper 82-13125

Application of the concept of dynamic trim and nonlinear systems in automated control of a vertical attitude takeoff and landing aircraft

AIAA Paper 81-2213

Powered-lift takeoff performance characteristics determined from flight test of the Quiet Short-haul Research Aircraft (QSRA)

AIAA Paper 81-2409

Rotor systems research aircraft/SSBJ/rotor force and source measurement simulation

AIAA Paper 81-2516

Powered-lift STOL aircraft shipboard operations - A comparison of simulation, land-based and sea trial results for the QSRA

AIAA Paper 81-2480

A large-scale investigation of engine influence on inlet performance at angle-of-attack

AIAA Paper 81-2396

The use of frequency methods in rotorcraft system identification

AIAA Paper 81-2396

Development of a comprehensive analysis for rotorcraft. II - Aircraft model, solution procedure and applications

AIAA Paper 82-14392

The 1-14 - 24 years of V/STOL flight testing

AIAA Paper 82-14407

Ground test of a large scale 'D' vented thrust deflecting nozzle

AIAA Paper 81-2630

Piloted simulation of hover and transition of a vertical attitude takeoff and landing aircraft

AIAA Paper 81-2636

Helical helicopter approaches with microcomputer landing system guidance

AIAA Paper 81-2654

Cooperation of the steady viscous flow over a tri-element 'augmentor wing' airfoil

AIAA Paper 82-0021

Bifurcation analysis of nonlinear stability of aircraft at high angles of attack

AIAA Paper 82-0244

Real-time simulation of helicopter IFB approaches into major terminal areas using NHV, MLS, and CDTI

AIAA Paper 82-0260

Coaptations of transonic flow over an oscillating airfoil with shock-induced separation

AIAA Paper 82-0350

Ground effect hover characteristics of a large-scale twin tilt-nacelle V/STOL model

AIAA Paper 81-2610

Experiment 1 investigation of a jet inclined to a supersonic crossflow

AIAA Paper 81-2610

Analysis of data from a wind tunnel investigation of a large-scale model of a highly maneuverable supersonic V/STOL fighter - STOL configuration

AIAA Paper 81-2620

Large-scale wind tunnel tests of a sting-supported V/STOL fighter model at high angles of attack

AIAA Paper 81-2621

Quiet Short-Haul Research Aircraft - The first 3 years of flight research

AIAA Paper 81-2625

Application of thrusting ejeclors to tactical aircraft having vertical lift and short-field capability

AIAA Paper 81-2629

Airframe effects on top-mounted inlet systems for VSTOL fighter aircraft

AIAA Paper 81-2631

Concept definition and aerodynamic technology studies for single-engine V/STOL fighter/attack aircraft

AIAA Paper 81-2647

Analysis of selected V/STOL concepts for a civil transportation mission

AIAA Paper 81-2655

Real-Time Simulation Computation System

AIAA Paper 81-2660

Analysis of flight test measurements in ground effect

AIAA Paper 81-27063

The outlook for advanced transport aircraft

AIAA Paper 81-27134

The effect of ejeclor augmentation on test-section flow quality in the Calipan 6-ft transonic wind tunnel

AIAA Paper 82-0571

Status and capabilities of the National Full Scale Facility 40- by 80-foot wind tunnel

AIAA Paper 82-0607

A new facility and technique for two-dimensional aerodynamic testing

AIAA Paper 82-0612

The design of a wind tunnel VSTOL fighter model incorporating turbine powered engine simulators

AIAA Paper 82-25154

Selection of some rotor parameters to reduce pitch-roll coupling of helicopter flight dynamics

AIAA Paper 82-26383

Performance improvements with the free-tap rotor

AIAA Paper 82-26387

Evaluation of the effect of elastostatic damping material on the stability of a bearingless main rotor system

AIAA Paper 82-26394

Large scale model measurements of airplane noise using cross-correlation techniques

AIAA Paper 82-26394

Numerical solution of Space Shuttle Orbiter flow field

AIAA Paper 82-0028

MARS - A fault tolerant distributed microcomputer architecture for aircraft navigation and control

AIAA Paper 82-27714

Test methodology for evaluation of fireworthly aircraft seat cushions

AIAA Paper 82-29596

Comparison between computations and experimental data in an unsteady three-dimensional transonic aerodynamics, including aeroelastic applications

AIAA Paper 82-30157

Radiation enhancement by nonequilibrium during flight through the Titan atmosphere

AIAA Paper 82-0578

Prediction of separated asymmetric trailing-edge flows at transonic Mach numbers

AIAA Paper 82-1021

Development of a helicopter rotor/propulsion system dynamics analysis

AIAA Paper 82-1078

General purpose research rotor

AIAA Paper 81-10

Design and evaluation of a state-feedback vibration controller

AIAA Paper 82-37777
C-27
Three-dimensional separation and reattachment
[BASA-TH-84221] p0393 882-24167
Prediction of aircraft handling qualities using
analytical models of the human pilot
[BASA-TH-84231] p0396 882-24408
Environmental fog/rain visual display system for
aircraft simulators
[BASA-CASE-ARC-11150-1] p0397 882-24212
Adaptive-wall wind-tunnel research at NASA Ames
Research Center
[BASA-TH-84236] p0397 882-24214
Review of the 1990 Wind-Tunnel/Flight
Correlation Panel
[BASA-TB-82-25198] p0403 882-25200
Tunnel-to-tunnel correlation
[BASA-TB-82-25262] p0404 882-25262
Barriers and damper surfaces in minimum-time
interception
[BASA-TH-84240] p0409 882-25262
A floating-point/multiple-precision processor
for airborne applications
[BASA-TH-84252] p0452 882-26289
Flight experiments using the front-side control
technique during piloted approach and landing as
a powered lift STOL aircraft
[BASA-TH-81337] p0456 882-26314
Quiet Short-Haul Research Aircraft (QSHA) model
select panel functional description
[BASA-TH-84243] p0470 882-27319
Aerodynamic interactions between a 1/10 scale
helicopter rotor and a body of revolution
[BASA-TH-84247] p0521 882-28525
Static noise tests on modified augmentor jet STOL research aircraft
[BASA-TH-81231] p0525 882-28925
Strip aerodynamics of an airfoil with a jet issuing
from its surface
[BASA-TH-84252] p0531 882-29267
Airfoil geometry verification with enhanced
computer generated displays
[BASA-TH-84256] p0531 882-29268
Predictions of transport aircraft interior
systems
[BASA-TH-82-29204] p0533 882-29204
Establishment of a rotor model basis
[BASA-TH-82-29311] p0535 882-29311
Correlation of prestress-tube data with laminar
skin friction (Log No. J12904)
[BASA-TH-84267] p0539 882-29556
Applications to aerodynamics of the theory of
transformations of nonlinear systems
[BASA-TH-84269] p0540 882-29558
Evaluation of a trajectory command concept for
annual control of carrier approaches and
landings
[BASA-TH-84256] p0553 882-30055
Separation monitoring with four types of
detectors on a cockpit display of traffic
information
[BASA-TH-84240] p0563 882-30856
An experimental study of dynamic stall on
advanced airfoil sections. Volume 1: Summary of
the experiment
[BASA-TH-84205-VOL-1] p0586 882-32214
Static investigation of the circulation control
wing/upper surface blunting concept applied to
the quiet short height research aircraft
[BASA-TH-84232] p0588 882-32343
Design of analytical failure detection using
secondary observers
[BASA-TH-84265] p0590 882-32346
Toward a better understanding of helicopter
stability derivatives
[BASA-TH-84277] p0592 882-32376
Holographic interferometry and tomography at
 Ames Research Center
[BASA-TH-82-25261] p0597 882-25261
Recent progress in YSTOL technology
[BASA-TH-82-33360] p0603 882-33364
User's manual for interfacing a leading edge,
 vortex roller program with two linear panel
 methods
[BASA-TH-84256] p0604 882-33340
Finite difference modeling of rotor flows
including wake effects
[BASA-TH-84240] p0604 882-33345
Recent applications of the transonic wing
analyses computer code, TWIN
[BASA-TH-84233] p0604 882-33346
Computational aerodynamics and design
[BASA-TH-84257] p0605 882-33348
An operational evaluation of head up displays
for civil transport operations. NASA/FAA
phase 3 report
[BASA-TP-1015] p0606 882-33348
A ground-simulator investigation of helicopter
longitudinal flying qualities for instrument
approach
[BASA-TH-84225] p0611 882-33390
Analysis of several glidepath and speed control
autopilot concepts for a powered lift STOL
aircraft
[BASA-TH-84282] p0611 882-33400
Noise measurement in wind tunnels, workshop
summary
[BASA-TH-84219] p0614 882-34188
Correlation Panel
[BASA-CASE-FBC-11041-1] p0259 882-18493
A review of flight-to-wind tunnel drag correlation
[BASA-CASE-FBC-11062-1] p0193 882-16800
Techniques for modifying airfoils and fairings
[BASA-TH-84217] p0054 882-13857
Solution to the hidden-line problem
[BASA-TH-84217] p0054 882-13857
Flight experience with a remotely augmented
oscillation experienced on the approach and
landing test of the space shuttle
[BASA-TH-81366] p0100 882-13149
NASA Dryden Flight Loads Research Facility
[BASA-TH-81366] p0105 882-15079
System for providing an integrated display of
instantaneous information relative to aircraft
temperature, altitude, heading, and horizontal
situation
[BASA-CASE-FFC-11005-1] p0189 882-16075
Multiple pure tone elimination strut assembly
[BASA-CASE-FFC-11062-1] p0193 882-16080
Adaptive-wall wind-tunnel research at NASA Ames
Research Center
[BASA-TH-81331] p0259 882-16493
Aircraft interrogation and display system:
A ground support equipment for digital flight
systems
[BASA-TH-81370] p0314 882-21175
Sun viewing guidance system for high altitude
aircraft
[BASA-CASE-FFC-11052-1] p0367 882-23231
An operational evaluation of head up displays
[BASA-TH-81359] p0398 882-24747
Angular wing
[BASA-CASE-FFC-11072-2] p0451 882-26277
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
FLIGHT RESEARCH CENTER, EDWARDS, CALIF.
A review of flight-to-wind tunnel drag correlation
[BASA-TH-84217] p0054 882-13857
Aerospace vehicle flight test technique
[BASA-TH-82-2417] p0054 882-13857
Aircraft aerodynamic design and flight test
experience
[BASA-PAPER 81-2431] p0055 882-13871
Recent propulsion systems flight tests at the
NASA Dryden Flight Research Center
[BASA-PAPER 81-2434] p0055 882-13874
Selected stability and control derivatives from
the first Space Shuttle entry
[BASA-PAPER 81-2451] p0057 882-13906
Flight test experience with high-alpha control
system techniques on the F-14 airplane
[BASA-PAPER 81-2456] p0057 882-13906
The development and flight test evaluation of an
integrated propulsion control system for the
BliAT research airplane
[BASA-PAPER 81-2467] p0059 882-13931
The development and use of a
computer-interactive data acquisition and
display system in a flight environment
[BASA-PAPER 81-2371] p0060 882-13966
Experience with flight test trajectory guidance
[BASA-PAPER 81-2504] p0063 882-14379
In-flight deflection measurement of the BliAT
aerodynamically tailored wing
[BASA-PAPER 81-2450] p0063 882-14381
A review of flight-to-wind tunnel drag correlation
[BASA-PAPER 81-2478] p0063 882-14382
Techniques for modifying airfoils and fairings
[BASA-PAPER 81-2480] p0064 882-14383
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, CONTIV

Measured and calculated effects of angle of attack on the transonic flutter of a supercritical wing
[AIAA Paper 81-2031] p0008 A82-10456

Supersonic jet noise generated by large scale installations
[AIAA Paper 81-1426] p0182 A82-10592

Circularly segmented ducts optimized for axisymmetric and standing wave sources
[AIAA Paper 81-2075] p0616 A82-34190

Simulation of the fluctuating field of a forced jet
[AIAA Paper 81-04506] p0615 A82-34191

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

LEWIS RESEARCH CENTER, CLEVELAND, OHIO.

Rotor wake characteristics relevant to rotor-stator interaction noise generation
[AIAA Paper 81-1911] p0100 A82-10546

Thermal and flow analysis of a connection, air-cooled ceramic coated porous metal concept for turbine vanes
[ASME Paper 81-HT-46] p0012 A82-10592

A summary of V/STOL inlet analysis methods
[AIAA Paper 81-2620] p0107 A82-16002

Propeller tip vortex - A possible contributor to aircraft cabin noise
[ASME Paper 81-1267] p0113 A82-17603

Development and operating characteristics of an advanced two-stage combustor
[AIAA Paper 81-1809] p0116 A82-17833

The NASA MSFC program - Developing new concepts for accurate flight planning
[AIAA Paper 81-2073] p0118 A82-17894

Effects of ultra-clean and centrifugal filtration on rolling-element bearing life
[ASME Paper 80-3006-AP] p0127 A82-18436

Low speed testing of the inletlets designed for a tandem-fan V/STOL nacelle
[AIAA Paper 81-2627] p0156 A82-19210

Throat modulation methods for a subsonic V/STOL aircraft jet
[AIAA Paper 81-2633] p0156 A82-19213

Comparison of two parallel/series flow turbofan propulsion systems for supersonic V/STOL
[AIAA Paper 81-2637] p0156 A82-19214

A real time NASA propulsion system model for V/STOL piloted simulation evaluation
[AIAA Paper 81-2663] p0157 A82-19221

Aeroelastic characteristics of a cascade of mistuned blades in subsonic and supersonic flows
[ASME Paper 81-DST-122] p0161 A82-19337

Aviation turbine fuel properties and their trends
[AIAA Paper 81-2366] p0163 A82-19623

Dilation jet behavior in the turn section of a reverse flow combustor
[AIAA Paper 81-2012] p0167 A82-20291

Advanced subsonic transport propulsion
[AIAA Paper 81-0811] p0180 A82-20874

Airline maintenance planning - The weather connection
[SAE Paper 81-0107] p0231 A82-24386

Influence of exit impedance on finite difference solutions of transonic acoustic mode propagation in ducts

High frequency sound emission from moving point multipole sources embedded in arbitrary transversely sheared mean flows
[ASME Paper 81-WG/SC-13] p0277 A82-26318

The role of modern control theory in the design of controls for aircraft turbine engines
[AIAA Paper 80-0320] p0282 A82-26526

Effect of mechanical surface and heat treatments on erosion resistance
[ASME Paper 81-1119] p0285 A82-27071

Performance degradation of propeller/rotor systems due to rare ice accretion
[AIAA Paper 81-0286] p0287 A82-28322

Measurement of aerodynamic work during fan flutter
[AIAA Paper 81-0287] p0289 A82-28322

Application of computer generated color graphic techniques to the processing and display of three dimensional fluid dynamic data
[ASME Paper 81-2908] p0328 A82-29008

Environmental and high strain rate effects on composites for engine applications
[AIAA Paper 81-0756] p0336 A82-30118

NASA's inlet analysis package for turbine engine fan blades
[AIAA Paper 81-0696] p0339 A82-30162

Turbine blade nonlinear structural and life analyses
[AIAA Paper 81-1056] p0415 A82-34981

Experimeental study of the effects of precleaned air on the emissions and stability of a lean premixed combustor
[AIAA Paper 81-1072] p0415 A82-34992

Advancements in real-time engine simulation technology
[AIAA Paper 81-1075] p0416 A82-34995

NASA Broad Specification Fuels Combustion Technology Program - Pratt and Whitney Aircraft Phase I results and status
[AIAA Paper 81-1088] p0416 A82-35000

In-flight acoustic results from an advanced-design propeller at Mach numbers to 0.8
[AIAA Paper 81-1120] p0416 A82-35017

Evaluation of fuel injection configurations to control carbon and soot formation in small ST combustors
[AIAA Paper 81-1175] p0417 A82-35041

A computational design method for transonic turbomachinery cascades
[AIAA Paper 82-GT-117] p0425 A82-35404

The use of optimization techniques to design controlled diffusion compressor blades
[AIAA Paper 82-GT-149] p0426 A82-35733

NASA research in aircraft propulsion - Advanced two-stage combustor
[AIAA Paper 82-GT-177] p0426 A82-35839

The effect of rotor blade thickness and surface finish on the performance of a small axial flow turbine
[AIAA Paper 82-GT-222] p0428 A82-35409

Structural dynamics of shroudless, hollow, fan blades with composite in-lays
[ASME Paper 82-GT-204] p0430 A82-35456

Composite containment systems for jet engines
[ASME Paper 82-GT-207] p0435 A82-37062

Kevlar/PBI-15 polyimide matrix composite for a complex shaped V/STOL combustor
[AIAA Paper 82-1097] p0437 A82-37678

Optical tip clearance sensor for aircraft engine controls
[AIAA Paper 82-1131] p0438 A82-37691

Aerodynamic performance of high turning core turbine vanes in a two-dimensional cascade
[AIAA Paper 82-1288] p0439 A82-37716

Performance of PFPB-lined composite journal bearings
[AIAA Paper 82-1286] p0439 A82-37716

Kevlar/PEEK-15 polyimide matrix composite for a complex shaped V/STOL combustor
[AIAA Paper 82-1097] p0437 A82-37678

Geometrical aspects of the tribological properties of graphite fiber reinforced polyimide composites
[AIAA Paper 82-1084-4] p0463 A82-37855

NASA research in combustor technology program - Phase I performance for contoured endwall stators
[AIAA Paper 82-1286] p0487 A82-40417

Propulsion opportunities for future commercial aircraft
[AIAA Paper 82-1089] p0487 A82-40418

Summary and recent results from the NASA advanced high-speed propeller research program
[AIAA Paper 82-1119] p0487 A82-40419

Performance of a 2D-C0 nonaxisymmetric exhaust nozzle on a turbojet engine at altitude
[AIAA Paper 82-1137] p0487 A82-40420

Comparison of experimental and analytic performance for contoured endwall stators
[AIAA Paper 82-1286] p0487 A82-40422

TP34 Convertible Engine System Technology Program
[p0569 A82-40521

A summary of V/STOL inlet analysis methods
[p0560 A82-40521

Low speed testing of the inletlets designed for a tandem-fan V/STOL nacelle
[HASA Paper 82-1272] p0303 A82-11042

A summary of V/STOL inlet analysis methods
[HASA Paper 82-2725] p0305 A82-11053

Selected bibliography of NASA-AIAA aircraft icing publications
[HASA Paper 82-1865] p0305 A82-11053

Integrated analysis of engine structures
[HASA Paper 82-2713] p0308 A82-11091

Progress in protective coatings for aircraft gas turbines: A Review of NASA sponsored research
[HASA-TP-2075] p0614 A82-34190

[HASA-TP-2072] p0614 A82-34189

[HASA-TP-2075] p0615 A82-34191

[HASA-TP-2072] p0615 A82-34189

[HASA-TP-2075] p0613 A82-33736

[HASA-TP-2072] p0614 A82-33736

[HASA-TP-2075] p0614 A82-33736

[HASA-TP-2072] p0613 A82-33736
The influence of turbulence models on rotor tip clearance effects on overall and kinematic precision of gear trains

Characterization of an experimental turbine

An airport Dixon shear detection and warning system using Doppler radar

Nonlinear constitutive theory for turbine engine structural analysis

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

An airport wind shear detection and warning system using Doppler radar

The influence of turbulence models on computer-simulated aircraft landing

Fiscal year 1981 scientific and technical reports, articles, papers, and presentations

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

Diffuser/duct system for a very high vacuum environment

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

The influence of turbulence models on rotor tip clearance effects on overall and kinematic precision of gear trains

Characterization of an experimental turbine

An airport Dixon shear detection and warning system using Doppler radar

Nonlinear constitutive theory for turbine engine structural analysis

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

An airport wind shear detection and warning system using Doppler radar

The influence of turbulence models on computer-simulated aircraft landing

Fiscal year 1981 scientific and technical reports, articles, papers, and presentations

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

Diffuser/duct system for a very high vacuum environment

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

The influence of turbulence models on rotor tip clearance effects on overall and kinematic precision of gear trains

Characterization of an experimental turbine

An airport Dixon shear detection and warning system using Doppler radar

Nonlinear constitutive theory for turbine engine structural analysis

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

An airport wind shear detection and warning system using Doppler radar

The influence of turbulence models on computer-simulated aircraft landing

Fiscal year 1981 scientific and technical reports, articles, papers, and presentations

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

Diffuser/duct system for a very high vacuum environment

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

The influence of turbulence models on rotor tip clearance effects on overall and kinematic precision of gear trains

Characterization of an experimental turbine

An airport Dixon shear detection and warning system using Doppler radar

Nonlinear constitutive theory for turbine engine structural analysis

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

An airport wind shear detection and warning system using Doppler radar

The influence of turbulence models on computer-simulated aircraft landing

Fiscal year 1981 scientific and technical reports, articles, papers, and presentations

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

Diffuser/duct system for a very high vacuum environment

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

The influence of turbulence models on rotor tip clearance effects on overall and kinematic precision of gear trains

Characterization of an experimental turbine

An airport Dixon shear detection and warning system using Doppler radar

Nonlinear constitutive theory for turbine engine structural analysis

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

An airport wind shear detection and warning system using Doppler radar

The influence of turbulence models on computer-simulated aircraft landing

Fiscal year 1981 scientific and technical reports, articles, papers, and presentations

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

Diffuser/duct system for a very high vacuum environment

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

The influence of turbulence models on rotor tip clearance effects on overall and kinematic precision of gear trains

Characterization of an experimental turbine

An airport Dixon shear detection and warning system using Doppler radar

Nonlinear constitutive theory for turbine engine structural analysis

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

RATIONAL SPACE FLIGHT CENTER, HUNTSVILLE, ALA.

An airport wind shear detection and warning system using Doppler radar

The influence of turbulence models on computer-simulated aircraft landing

Fiscal year 1981 scientific and technical reports, articles, papers, and presentations

Proceedings: Fifth Annual Workshop on Meteorological and Environmental inputs to Aviation Systems

The Marshall Space Flight Center KC-135 zero gravity test program for FY 1981

Diffuser/duct system for a very high vacuum environment

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
NATIONAL TRANSPORTATION SAFETY BOARD.

p0603 A82-10220
Instrumented aircraft verification of clear-air
radar detection of low-level wind shear
p0604 A82-10221
Simulation of phugoid excitation due to
hazardous wind shear
[IAIA PAPER 82-02151]
The Joint Airport Weather Studies Project
p0117 A82-17944
An evaluation of the Rosemount ice detector
for cloud water content measurements
[PB82-150833]
p0536 A82-29321
Optima performance and wake geometry of
coa-axial rotor in hover
p0249 A82-18156
NATIONAL DEFENCE HEADQUARTERS, OTTAWA (ONTARIO).
Compressor stall inducing installation effects
of an engine control parameter for the CF-5
aircraft
p0095 A82-13085

NATIONAL GAS TURBINE ESTABLISHMENT, PETERSFORD
(ENGLAND).
Prediction and measurement of time-variant,
three-dimensional flows in military aircraft
intakes
p0093 A82-13069

NATIONAL INST. FOR AERONAUTICS AND SYSTEMS
TECHNOLOGY, PRETORIA (SOUTH AFRICA).
Design of dynamically-scaled, asymmetrical wind
channel models
[HiST-78/18]
p0356 A82-22285
NATIONAL MECHANICAL ENGINEERING RESEARCH INST.,
PRETORIA (SOUTH AFRICA).
Use of composite materials for helicopter rotor
blades
[PB82-124041]
p0316 A82-21191

NATIONAL OCEAN SURVEY, BUCKFIELD, ME.
United States Coast Pilot 5. Pacific and Arctic
Coasts Alaska: Cape Spencer to Beaufort Sea
[PB82-10562]
p0254 A82-18201
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
BOULDER, COL.
Development of a clear air radar to detect
meteorological hazards at airports
[AD-A108236]
p0260 A82-18835
Evaluation of a meteorological airborne pulse
doppler radar
[PB82-156860]
p0562 A82-30820
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
NORMAL, ILL.
Doppler radar research and application to
aviation flight safety, 1977 - 1979
[AD-A108985]
p0303 A82-20163
Field program operations: Turbulence and gust
front
[AD-A115447]
p0562 A82-30804

NATIONAL RESEARCH COUNCIL OF CANADA, OTTAWA
(ONTARIO).
Compressor stall inducing installation effects
of an engine control parameter for the CF-5
aircraft
p0095 A82-13085
Some piloting experiences with multifunction
isometric side-arm controllers in a helicopter
p0365 A82-23218
Evaluations of helicopter instrument-flight
handling qualities
[AD-A114004]
p0524 A82-28205

NATIONAL SURVEY STORES LHR., LONDON, ENG.
An airport wind shear detection system using doppler radar
p0604 A82-10221

NATIONAL TRANSPORTATION SAFETY BOARD, WASHINGTON,
D. C.
Special investigation report. Search and rescue
procedures and arming of emergency locator
transmitter: Aircraft accident near Michigan
City, Indiana, 7 December, 1980
[PB81-29427]
p0108 A82-16058
Aircraft accident report - Universal Airlines,
Inc., Beech 65-A80/Excalibur Conversion,
NATIONAL WEATHER SERVICE, MD100W, near Radissonville, Tex., July 2, 1981
[WP85-B-11-17] p0199 HB2-17138
Air craft icing avoidance and protection
[WP82-108135] p0200 HB2-17139
Briefs of aircraft accidents 1977-1979 [WP82-115061] p0351 HB2-22237
Cabin safety in large transport aircraft [WP82-129297] p0644 HB2-27244
Briefs of accidents involving missing and missing later recovered aircraft, U.S. general aviation, 1979 [WP82-139059] p0644 HB2-27246
Briefs of accidents involving alcohol as a cause/ factor, U.S. general aviation, 1979 [WP82-139042] p0645 HB2-27247
Briefs of fatal accidents involving weather as a cause/ factor, U.S. general aviation, 1979 [WP82-139036] p0645 HB2-27248
Briefs of accidents involving rotorcraft, U.S. general aviation, 1979 [WP82-139023] p0665 HB2-27249
Briefs of accidents involving turbine powered aircraft, U.S. general aviation, 1979 [WP82-139010] p0665 HB2-27250
Listing of aircraft accidents/incidents by make and model, U.S. civil aviation, 1979 [WP82-139004] p0665 HB2-27252
Annual review of aircraft accident data: U.S. air carrier operations, 1979 [WP82-139000] p0665 HB2-27253
Briefs of accidents involving computer air carriers and on-demand air taxi operations, U.S. general aviation, 1979 [WP82-138991] p0665 HB2-27255
Briefs of accidents involving aerial application operations, U.S. general aviation, 1979 [WP82-138983] p0665 HB2-27256
Briefs of accidents involving aerial/near home built aircraft, U.S. general aviation, 1979 [WP82-138975] p0665 HB2-27257
Briefs of accidents involving gliders, U.S., general aviation, 1979 [WP82-138962] p0666 HB2-27258
Special investigation report: Air traffic control system [WP82-136276] p0523 HB2-28277
Annual review of aircraft accident data: U.S. general aviation calendar year 1979 [WP82-136260] p0532 HB2-29278
NATIONAL WEATHER SERVICE, SILVER SPRING, MD.
Automated Low-cost Weather Observation System (ALOOS) [AD-4117447] p0618 HB2-33954
NAVAL ACADEMY, ANnapolis, MD.
Projects on low altitude cloud icing research [AD-4114507] p0631 HB2-21107
NAVAL AIR DEVELOPMENT CENTER, WarriNIN, PA.
Investigation of functional comonality of avionics systems in naval aircraft [AD-4110013] p0133 HB2-14000
A generalized escape system simulation computer program: A user's manual [AD-4106123] p0187 HB2-16055
Recent developments and materials and processes for aircraft corrosion control p0212 HB2-17361
Corrosion in naval aircraft electronic systems p0212 HB2-17363
Physiological acceptability tests of the 55D-5A ejection seat: Second physiological acceptance demonstration [AD-4106086] p0253 HB2-18199

DEVELOPMENT OF AN EJECTION SEAT BALLISTIC BLOCK FOR THE S-3A AIRCRAFT [AD-4109580] p0303 HB2-20161
Development of a supported airbag ejection restraint (SABER) for windblast protection [AD-4109507] p0303 HB2-20162
A short take-off performance computer program [AD-4109861] p0504 HB2-20179
Development of longitudinal equivalent system models for selected US Navy tactical aircraft [AD-4109488] p0306 HB2-20189
VTOL and STOL handling qualities specifications, an overview of the current status [AD-4106249] p0364 HB2-23209
Statistical review of counting accelerometer data for Navy and Marine fleet aircraft from January 1962 to June 1961 [AD-4110660] p0407 HB2-25243
Current ADB restraint system status, trade-off constraints and long range objectives for the maximum Performance Ejection System (MPS) [AD-4112645] p0644 HB2-27238
An oxygen enriched air system for the AV-8 [AIRCRAFT HYDRAULIC FLUIDS [AD-4112437] p0475 HB2-27506
Titanium surface treatments for adhesive bonding [AD-4115782] p0560 HB2-30378
Replacement of aboard naval aircraft avionics systems [AD-4111570] p0560 HB2-30378
User's guide for the rotorcraft flight simulation computer program CS1, A6AP80 version, CRB conversion [AD-4115801] p0594 HB2-33288
Survey and update of F-14A mission profiles for TF30 engine usage [AD-4116831] p0603 HB2-33337
The AIDS/F-16 diffraction handbook: [AD-4116026] p0600 HB2-33382
NAVAL AIR ENGINEERING CENTER, LARHOBST, N.J.
Investigation of crossdeck pendant catapult shot interaction: proposed corrective measures [AD-4108169] p0258 HB2-10323
Application of wear debris analysis to aircraft hydraulic fluids [AD-4108891] p0558 HB2-30305
NAVAL AIR PROPULSION TEST CENTER, TOTTORIB, N.J.
A method for designing inlet distortion screens for aircraft gas turbine engine tests using an interactive computer program [NASA/CC-165380] p0569 HB2-31325
NAVAL AIR SYSTEMS COMMAND, WASHINGTON, D. C.
Ground effect hover characteristics of a twin tilt-nacelle Y/STOL model [AIAA PAPER 81-2609] p0155 HB2-19201
Aerodynamic characteristics of a large-scale, twin tilt-nacelle Y/STOL model [AIAA PAPER 81-0150] p0482 HB2-38443
A tutorial on distributed processing in aircraft/avionics applications [AD-4109604] p0196 HB2-17089
Economic considerations for real-time naval aircraft/avionics distributed computer control systems [AD-4109604] p0196 HB2-17097
Conformal antenna array design handbook [AD-4110991] p0322 HB2-21483
The military flying qualities specification: a help or a hindrance to good fighter design [AD-4109604] p0346 HB2-22190
Attack and en route avionics for in-weather operations [AD-4109604] p0346 HB2-22190
NAVAL AIR TEST CENTER, PATUXENT RIVER, MD.
A12-166 PD/FY-8C environmental evaluation flight test [AD-4109198] p0314 HB2-21178

C-38

CORPORATE SOURCE INDEX
An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacities

A proposal for the development of a balanced active antenna and impulse noise blanket system for the HSAT Y radio navigation receiver

An assessment of the combustion process in solid fuel ramjets

Cannibalization of the F-14 and S-3A aircraft: An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacities

A summary of the Naval Postgraduate School Research Program

Cannibalization of the F-14 and S-3A aircraft

A laboratory evaluation of the suitability of a xenon flashlamps model as an aid-to-navigation system

Evaluation of three percent aqueous film forming foam (AFFF) concentrates as fire fighting agents

An investigation of the effects of smoke suppressant fuel additives on engine and test cell exhaust gas opacities

A laterall response of an airship to turbulence

A laboratory evaluation of the suitability of a xenon flashlamps model as an aid-to-navigation system

An investigation of the combustion process in solid fuel ramjets

A laboratory evaluation of the suitability of a xenon flashlamps model as an aid-to-navigation system

An investigation of the combustion process in solid fuel ramjets

Evaluation of three percent aqueous film forming foam (AFFF) concentrates as fire fighting agents
Aeroelastic characteristics of a mistuned bladed-disc assembly
A tactical display aid for primary flight training
Performance evaluation of a kinematical-tactual display
Baseline actuation and its effect on airfoil performance
A prototype interface unit for microprocessor-based Loran-C receiver
OSU UNIV., COLUMBUS, OH
Ohio University, 1981
Loran-C prototype navigation receiver for general aviation
ILS performance assessment, task 1, Volume I: Evaluation procedures and equipment design
A prototype interface unit for microprocessor-based Loran-C receiver
UTD terrain reflection model with application to ILS glide slope
Investigation of air transportation technology at Ohio University, 1981
Loran-C plotting program for plotting lines of position on standard charts
A Loran-C prototype navigation receiver for general aviation
A Loran-C prototype navigation receiver for general aviation
Constant automatic gain control system
A prototype interface unit for microprocessor-based Loran-C receiver
A Loran-C prototype navigation receiver for general aviation
Evaluation of the FAA/WEPP weather data device
Efficient transfer of weather information to the pilot in flight
Corporation Source Index

C-41

OLD DOMINION UNIV., NORFOLK, VA
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack
Flow element thermal analysis of convectively-cooled aircraft structures
Comparative study of flare control laws
Airborne antenna pattern calculations
Experimental study of delta wing leading-edge devices for drag reduction at high lift
Scale-model studies for the improvement of flow patterns of a low-speed tunnel
Energy environment study
Aerodynamic performance of slender wings with separated flows
Leading-edge flap system for aircraft control augmentation

P
PACE ASSOCIATES, INC., NEWTON, MA
Heavy-duty engine analysis, study 4: A preliminary market analysis for gas-turbine applications in the farm market
PACE SYSTEMS, INC., ALEXANDRIA, VA
Cockpit integration from a pilot's point of view
PACIFIC NORTHWEST LAB., RICHLAND, WASH.
Development of in-can melting process and equipment, 1979 and 1980
PACIFIC-SIERRA RESEARCH CORP., SANTA MONICA, CALIF.
Transverse electric waves for VLF/LF communication between aircraft
PARAH, INC., BALTIMORE, MD
Advanced fuel flowmeter for future naval aircraft
PARSONS (RALPH B.) CO., PASADENA, CALIF.
Fuel quality processing study, Volume 1
FUEL QUALITY/PROCESSING STUDY, Volume 2: Appendix. Task 1 literature survey
PEER CONSULTANTS, INC., ROCKVILLE, MD
Executive summary of systems analysis to develop future civil aircraft noise reduction alternatives
PENNJSLARIA STATE UNIV., UNIVERSITY PARK
Three dimensional turbulent boundary layer development on a fan rotor blade
Three dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage

Old Dominion University
Steady and unsteady nonlinear hybrid vortex method for lifting surfaces at large angles of attack
A prototype interface unit for microprocessor-based Loran-C receiver
Ohio University, 1981
Loran-C prototype navigation receiver for general aviation
A prototype interface unit for microprocessor-based Loran-C receiver
A Loran-C prototype navigation receiver for general aviation
Efficient transfer of weather information to the pilot in flight

Pennsylvania State University
Three dimensional turbulent boundary layer development on a fan rotor blade
Three dimensional mean velocity and turbulence characteristics in the annulus wall region of an axial flow compressor rotor passage

C-41
Investigation of spray characterization for flash heating injection of fuels containing dissolved air and superheated fuels

Computer simulation of three-dimensional potential flow fields in which aircraft propellers operate

The dynamic flexural response of propeller blades

Techniques suitable for a portable wear metal analysis

Improved plasma sprayed BCrAlI coatings for Corrosion inhibiting engine oils

Energy efficient engine: Turbine transition

Performance deterioration due to acceptance sensor failure detection system

Experimental investigation of aeroelastic problems of engine response during transient

Damage tolerant design for cold-section turbine structural tailoring of engine blades (STABBL)

B747/JT9O flight loads and their effect on engine running clearances and performance deterioration: BAC111/P and RA J99 engine diagnostic programs

Energy efficient engine: High pressure turbine uncooled rig technology report

Energy efficient engine: Turbine transition duct model technology report

Optimization of compressor vane and bleed settings

Corrosion inhibiting engine oils

Damage tolerant design for cold-section turbine engine disks

PBATT ABO BHITBEI AIBCBAFI 6BOOP. BBST PAID BBACB, POLITBCBICO DI HILAHO (IT1LI). FBBKIH-BUBB COBP., FLA.

PBAtt AID BHISIEI AIBCBAFT GROUP, BAST BAB1FOBO, PILATOS AIBCBAFI LTD.. SIMS (S8ITBBI.AHD) . PILATOS AIBCBAFI LTD., SIMS (S8ITBBI.AHD). PBBKIS-EIHKH COBP., POBOHA. CALIF.

Improved plasma sprayed BCrAlI coatings for Corrosion inhibiting engine oils

Energy efficient engine: Turbine transition

Performance deterioration due to acceptance sensor failure detection system

Experimental investigation of aeroelastic problems of engine response during transient

Damage tolerant design for cold-section turbine structural tailoring of engine blades (STABBL)

B747/JT9O flight loads and their effect on engine running clearances and performance deterioration: BAC111/P and RA J99 engine diagnostic programs

Energy efficient engine: High pressure turbine uncooled rig technology report

Energy efficient engine: Turbine transition duct model technology report

Optimization of compressor vane and bleed settings

Corrosion inhibiting engine oils

Damage tolerant design for cold-section turbine engine disks

PBATT ABO BHITBEI AIBCBAFI 6BOOP. BBST PAID BBACB, POLITBCBICO DI HILAHO (IT1LI). FBBKIH-BUBB COBP., FLA.
RADIO TECHNICAL COMMISSION FOR AERONAUTICS,
WASHINGTON, D.C.
Software considerations in airborne systems and
equipment certification
[BST/DO-167] p0193 B82-16759
PB broadcast interference related to airborne
ILS, VOR and VHF communications
[BST/DO-176] p0268 B82-19419
Investigation of technical requirements
Investigation of airborne VHF communication and
guidance equipment
Investigation of the effects of airborne
installation factors on overreceiver interference
FAR/FCC coordination procedures for PB broadcast
stations
Minimum operational performance standards for
direct automatic direction finding (ADF) equipment
[BST/DO-179] p0523 B82-28270
RAND CORP., SANTA MONICA, CALIF.
A new approach to modeling the cost of ownership
for aircraft systems
[AD-A105287] p0102 B82-13979
Distributed intelligence for air fleet control
[AD-A10561] p0253 B82-18195
Preplanned product improvement and other
modification strategies: Lessons from past
aircraft modification programs
[AD-A11359] p0463 B82-27220
AUTOPILOT: A distributed planner for air fleet
control
[AD-A110739] p0467 B82-27269
Scenarios for evolution of air traffic control
[AD-A112566] p0467 B82-27270
Reflections on an F-43 in flight emergency
[AD-A116673] p0605 B82-33358
Palm's theories for nonstationary processes
[AD-A117067] p0619 B82-34315
RESEARCH POLYTECHNIC INST., THOR., N.Y.
Determination and analysis of jet and missile
fuel deposits
[AD-A105658] p0909 B82-12248
Composite structural materials
[BSA-CR-156512] p0193 B82-16182
Parallel computation for developing nonlinear
control procedures
[AD-A107914] p0209 B82-17227
Mechanisms of corrosion fatigue
[AD-A110739] p0210 B82-17343
Investigation of passive shock wave-boundary
layer control for transonic airfoil drag reduction
[BSA-CR-166804] p0349 B82-22209
An analytical study of turbulence response,
including horizontal tail loads, of a control
configured jet transport with relaxed static
stability
[AD-A117552] p0655 B82-26313
RESEARCH INST. OF NATIONAL DEFENCE, LONDON
(SWEDEN)
Detection of obstacles by low flying aircraft
[FOA-C-30227-21] p0140 B82-15026
Transonic measurements under electric pulse
excitation in 371 Vagner aircraft
[FOA-C-30243-41] p0370 B82-23409
RESEARCH INST. OF NATIONAL DEFENCE, STOCKHOLM
(SWEDEN)
Lightning effects on aircraft and components.
Literature study on lightning strikes and protection
[FOA-C-30388-P9] p0025 B82-10024
RESEARCH INST. OF NATIONAL DEFENCE, Uppsala (SVERIGE)
RADIK simulator for aircraft instruments
[BSA-CF-930000-G2] p0350 B82-22286
RESEARCH TRUST INSTITUTE, RESEARCH TRIPOLE PARK, N.C.
An advanced programmable/reconfigurable color
graphics display system for crew station
technology research
[BSA-CF-81-2314] p0805 B82-13516
Production of Reliable Flight Crucial Software:
Validation Methods Research for Fault Tolerant
Avionics and Control Systems Sub-Working Group
Meeting
[BSA-CF-2222] p0400 B82-24045
Problems related to the integration of fault
tolerant aircraft electronic systems
[BSA-CR-156526] p0530 B82-29022
NATIONAL LAB., ROSEVILLE (DELBARE) -
Aerodynamic forces acting on the blades of stall
regulated propeller type windmills
[BSA-B3-90117] p0573 B82-31718
ROCKWELL INTERNATIONAL CORP., CEDAR RAPIDS, IOWA.
Digital flight controls
State-of-the-art cockpit design for the HH-65A
helicopters
Delta electrical load analysis C-141B JACC/CP
aircraft
[AD-A113761] p0524 B82-28263
ROCKWELL INTERNATIONAL CORP., COLUMBUS, OHIO.
Investigation of acoustic interactions in jet
thrust augmenting ejectors
[AD-A106083] p0101 B82-13835
FTP-12A diagnostic and development programs
[AD-A100354] p0250 B82-19206
ROCKWELL INTERNATIONAL CORP., DOWNEY, CALIF.
Develop, demonstrate, and verify large area
composite structural bonding with polyimide
adhesives
[BSA-CR-156539] p0859 B82-26665
Spiral slotted phased antenna array
[BSA-CASE-RSC-1852-1] p0576 B82-27558
Supersonic cruise/transonic maneuver wing
section development study
[AD-A110686] p0480 B82-26256
ROCKWELL INTERNATIONAL CORP., LOS ANGELES, CALIF.
SIMAT onboard flight computer system
architecture and qualification
[BSA-81-2107] p0001 B82-10062
SIMAT aerodynamic design and flight test
experience
[BSA-PAPER 81-2433] p0095 B82-13871
Performance of FTPS-linked composite joint
bearings
[ASL-PPRINT 82-M-1a-1] p0643 B82-37654
Sup/9B titanium concepts for structural
efficiency for B747
[AD-A110760] p0302 B82-20154
Investigation of aircrew protection during
emergency escape at dynamic pressures up to
1600 Q
[AD-A117552] p0605 B82-33359
ROCKWELL INTERNATIONAL CORP., THOUSAND OAKS, CALIF.
Superplastic aluminum evaluation
[AD-A107760] p0210 B82-17338
ROLLS-ROYCE LTD., BRISTOL (ENGLAND)
The subsonic performance of practical military
variable area convergent nozzles
[BSA-90050] p0944 B82-13076
ROLLS-ROYCE LTD., DENBY (ENGLAND)
Establishment of an experimental technique to
provide accurate measurement of the installed
drag of close coupled civil nacelle/airframe
configurations, using a full span model with
turbine powered engine simulators
[AD-A105658] p0096 B82-13089
Aerodynamic considerations in the prediction of
installed supersonic flitter in transonic fans
[AD-A105658] p0143 B82-15058
Coatings in the aero gas turbine
[PHR-90049] p0310 B82-21204
Process development and evaluation of gas
turbine engine components in IH 82
[PHR-90050] p0310 B82-21205
The testing and approval of aircraft engine
mounted accessories
[PHR-90050] p0310 B82-21206
BOIL AIE DEVELOPMENT CENTER.

Developments to improve the noise and combustion emissions on the Fokker F28 aircraft and its Rolls-royce RB183-555 engines. Section 1: Development of the new internal 10-hole mixer

[PHR-90061]
p0318 h82-21207

Engines for air transport

[PHR-90066]
p0319 h82-21209

Allowing for the wall boundary layer in a stage of an axial compressor

[PHR-90067]
p0319 h82-21210

The Rolls royce role in aircraft noise reduction

[PHR-90065]
p0319 h82-21210

The mechanical testing of compressors and turbines for aircraft gas turbine engines

[PHR-90070]
p0319 h82-21211

Telemetry in aero engine development

[PHR-90055]
p0321 h82-21247

The impact and future direction of aircraft noise certification

[PHR-90053]
p0322 h82-21788

Standards in aircraft noise certification

[PHR-90052]
p0322 h82-22005

The benefits of data exchange

[PHR-90048]
p0223 h82-22095

Defects and their effect on the behavior of gas turbine discs

[PHR-90071]
p0346 h82-22178

RB211 powerplant deterioration: Review of current situation and lessons learned

[PHR-90073]
p0355 h82-22270

The contribution of thermal barrier coatings to improvements in the life and performance of gas turbine components

[PHR-90076]
p0355 h82-22271

Development of a correlated finite element dynamic model of a complete aerov engine

[PHR-90081]
p0355 h82-22272

Encounters with surge: Some experiences of development of axial compressors for aero gas turbines

[PHR-90071]
p0355 h82-22274

Releable power

[PHR-90078]
p0355 h82-22275

Fuel efficiency engines for large transport aircraft

[PHR-90082]
p0355 h82-22276

Collaborative development of aero-engines

[PHR-90083]
p0355 h82-22277

Multi-mission V/STOL with vectored thrust engines

[PHR-90086]
p0356 h82-22278

Directional solidification: Project 82

[PHR-90080]
p0356 h82-22279

Powder metallurgical innovations for hot section alloys in aero-engine applications

[PHR-90072]
p0357 h82-22358

ROLLS-BOYCE LTD. LEAFSENDEN (ENGLAND).

Mecchanical advances in the design of small turboshaft engines

[p0207 h82-17208

An alternative approach to engineering structures using monitoring systems

[p0209 h82-17223

ROLLS-BOYCE LTD., LONDON (ENGLAND).

The outlook for advanced transport aircraft

[p0181 h82-21374

ROLLS-BOYCE LTD., WATFORD (ENGLAND).

Materials: Development of a new generation of materials used to assess the installed power of a helicopter engine

[p0246 h82-18133

BON AIR DEVELOPMENT CENTER, GRIFFIS, A.R., U.S.A.

T-T/F polarization ratios in a sample of 30 K K x30 received at altitudes from 0 to 10 km

[AD-180810]
p0258 h82-18064

* Radar frequency radiation

[AD-111052]
p0411 h82-25424

Tactical simulation system to interact with a unit of echelon moving targets using real time sensors

[AD-111390]
p0722 h82-27306

BOSS ENGINEERING AND RESEARCH, INC., EXCELINE

VILLAGE, N.H.

The effect of ejector augmentation on test-section flow quality in the Calamay P-t transonic wind tunnel

[ATIA 82-0571]
p0236 h82-24458

Nearfield aeroacoustics and optical propagation characteristics of a large-scale turret model

[AD-111390]
p0529 h82-20624

ROYAL AIR FORCE, DERRHAM (ENGLAND).

Detection and prevention of corrosion is Royal Air Force aircraft

[PHR-90070]
p0211 h82-17351

ROYAL AIRCRAFT ESTABLISHMENT, BEDFORD (ENGLAND).

Adaptation of a turbine test facility to high-temperature research

[PHR-90070]
p0040 h82-11089

Some B+ research on shielded and unshielded fuselage mounted air intakes at subsonic and supersonic speeds

[p0093 h82-13068

ROYAL AIRCRAFT ESTABLISHMENT, FARNBOROUGH (ENGLAND).

Design considerations for optimal flight control systems

[p039 h82-11077

Use of a helmet-mounted matrix display for presenting energy-manueverability information during simulated close combat

[p0092 h82-13061

A true air speed sensor for miniature unmanned aircraft

[PHR-90072]
p0133 h82-16086

The design of a jet catcher

[PHR-90072]
p0135 h82-14102

An afterbody drag balance

[PHR-90072]
p0135 h82-14103

Integrated control of mechanical systems for future combat aircraft

[p0197 h82-17117

Corrosion control measures for military aircraft: Present US requirements and future developments

[p0212 h82-17358

The measurement of the mobility of structures at acoustic frequencies

[p0248 h82-18149

Preliminary investigation into the addition of auxiliary longitudinal thrust on helicopter agility

[p0269 h82-18155

Some unsteady aerodynamic effects on helicopter rotors

[p0250 h82-18162

New developments in cockpit-human interfaces

[PHR-90071]
p0255 h82-18215

A design for a 32-channel multiplexer

[PHR-90072]
p0259 h82-18503

A criterion for the prediction of the recovery characteristic of supersonic aircraft

[PHR-90072]
p0267 h82-19223

A summary of experimental data on wing characteristics at transonic speeds

[PHR-90072]
p0312 h82-21155

Low-speed measurements of the static pressure distribution and overall forces on a cambered and a symmetric mild gothic wing of aspect ratio 1.4

[PHR-90072]
p0346 h82-22195

Characteristics of spinning aircraft structures using monitoring systems

[PHR-90072]
p0345 h82-22170

The application of subsonic theoretical aerodynamics to current situation and lessons learned during simulated close combat

[p0372 h82-22050

The design of a jet catcher

[p0319 h82-21212

Non-destructive test of high-temperature research

[PHR-90070]
p0322 h82-21217

The application of subsonic theoretical aerodynamics to control devices

[PHR-90070]
p0320 h82-21216

Non-destructive inspection and the implementation of a damage tolerant design philosophy

[PHR-90070]
p0322 h82-21201

Some applications of Hartmann-type sources in aircraft noise research

[PHR-90070]
p0323 h82-22007

The Royal Aircraft Establishment: Ten years of research

[PHR-90070]
p0346 h82-22144

Gunfire blast pressure predictions

[p0345 h82-22170

Enhanced piloting control through cockpit facilities and A.C.T.

[p0347 h82-22195

Airfield visual aids research at the Royal Aircraft Establishment

[PHR-90070]
p0351 h82-22242
The determination of critical flutter conditions of nonlinear systems
[SAD-TR-81-006] p0397 H82-24210
Fuel system protection methods
p0533 H82-29263
Propagation problems associated with aircraft communications systems
p0539 H82-29535
Flight trials of the Litton LTB-211 (OCT-82)
[SAD-TR-ADAFY-167] p0058 H82-32099
TOTAL NETHERLANDS AIR FORCE, SORRENBURG.
Review of practical experience on combat aircraft maneuverability
p0396 H82-22189
TOTAL NETHERLANDS AIRCRAFT FACTORIES FOKKER,
ARZTSTAD.
A wind tunnel study of the flutter characteristics of a supercritical wing
[SAB-AF-81002-0] p0159 H82-17129
TOTAL NETHERLANDS AIRCRAFT FACTORIES FOKKER,
SRCHEFZ.-OST.
 Aerodynamic aspects of a high bypass engine installation on a fuselage afterbody
p0096 H82-13093
SAN ANTONIO AEROSPACE LIGHTING CORP., KELLY AFB., TEL.
0-10a nose gear fork damage analysis
[AD-A114092] p0407 H82-25244
SAN JOSE STATE UNIV., CALIF.
Development and testing of dry chemicals in advanced arctic systems for jet engine nacelle fire detection
[SAS-CH-165011] p0101 H82-13186
SARAH LAB., ALBUQUERQUE, N. M.
Methods for analysis of wind ripple in wind turbines
[SABD-81-7006] p0306 H82-20193
Approach to the fatigue analysis of vertical-axis wind turbine blades
 [SABD-82-003193] p0308 H82-20257
User's manual for the vertical axis wind turbine code VARTB
p0461 H82-26628
User's manual for the ADRP flight path-trajectory simulation code
[SABD-82-000796] p0538 H82-29343
Reduction in parachute drag due to forebody wake effects
p028-80-03124
SCHOOL OF AERO SPACE MEDICINE, BROOKS AFB, TEL.
Human factors evaluation of C-141 fuel system
[SAD-104931] p0550 H82-30304
SCI TECHNS, INC., HUNTSVILLE, ALA.
Techniques for interfacing multiple systems
[AD-A10870457] p0098 H82-13135
SCIENCE APPLICATIONS, INC., CARDOX PARK, CALIF.
Multiple-scale turbulence modeling of free turbulent flows
[SAB-AF-81002-20] p0012 H82-10534
SCIENTIFIC STUFFS, INC., CAMBRIDGE, MASS.
Determination of material properties by limited scan X-ray tomography
[AD-A116670] p0594 H82-32422
SCHIFF INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CALIF.
Airborne measurements of European sea and terrain radiances
[AD-A116437] p0562 H82-30702
SERVICE TECHNIQUES DES PROGRAMMES AERONAUTIQUES,
PARIS (FRANCE).
Helicopter development in France
p0208 H82-17216
 THE EXPERIENCE OF CORROSION ON FRENCH MILITARY AEROPLANES.
A review of recent AGARD Symposium on the corrosion of maneuverability of combat aircraft
p0346 H82-22188
SEVILLE RESEARCH CORP., PENSACOLA, FLA.
Operational test and evaluation handbook for aircraft training devices. Volume I: Planning and management
p0546 H82-22188
SEVILLE RESEARCH CORP., COBOB.. PABIS (FBABCE).
SEVILLE TECHNIQUES DBS PBOGBABBBS ABBOIAOTIOBS.
SCBIPPS IBSTITOTIOB OF OCBABOGBAPHI, LA JOLLA, CALIF.
SCI SISTEHS, IIC., HOBYVILLB, ALA.
SAB ABIOBIO AIB LOGISTICS FZABZBB. KEL1I AFB.. TEX.
BOIAL BBTHEBLABDS AIBCBAFT FACTOBIBS FOKKBB.
BOIAL BBTHEBLABDS AIB FOBCB. SOBSTEBBBBG.
SCHIPHOL-OSI.
Sil JOS$ STATE Oil?., CALIF.
SAB ABIOBIO AIB LOGISTICS FZABZBB. KEL1I AFB.. TEX.
BOIAL BBTHEBLABDS AIBCBAFT FACTOBIBS FOKKBB.
BOIAL BBTHEBLABDS AIB FOBCB. SOBSTEBBBBG.
SAB ABIOBIO AIB LOGISTICS FZABZBB. KEL1I AFB.. TEX.
BOIAL BBTHEBLABDS AIBCBAFT FACTOBIBS FOKKBB.
BOIAL BBTHEBLABDS AIB FOBCB. SOBSTEBBBBG.
Flight management computer  
[SOCIETE-TURBOMECA, BORDERS (FRANCE)]  
- Development test programs adapted to helicopter engines  
- p0399 H82-24842

SOCIETE_TURBOMECA, BORDERS (FRANCE)  
- The influence of new turbine technologies on their components  
- p0207 H82-17205

SOLAR TUBERIES INTERNATIONAL, SAN DIEGO, CALIF.  
- Evaluation of cast titanium alloy compressor components, volume 1  
- [AD-A111431] p0396 H82-24204

SOUTHAMPTON UNIV. (ENGLAND)  
- Comparing the relationships between noise level and annoyance in different surveys - A railway noise vs. aircraft and road traffic comparison  
- p0339 H82-16716

Developments in rotary wing aircraft aerodynamics  
- [SOCIETE TUBERIES, SAN DIEGO, CALIF.]  
- p0245 H82-18120

Wind tunnel investigation of high speed rotor noise  
- [SOCIETE TUBERIES, SAN DIEGO, CALIF.]  
- p0248 H82-18146

A method of predicting fuselage loads in hover  
- [SOCIETE TUBERIES, SAN DIEGO, CALIF.]  
- p0250 H82-18164

Vibration of structures excited acoustically  
- [SOCIETE TUBERIES, SAN DIEGO, CALIF.]  
- p0297 H82-20343

Control software for two dimensional airfoil  
- [SOCIETE TUBERIES, SAN DIEGO, CALIF.]  
- p0298 H82-20146

Helicopter model studies for on-board diagnostics  
- [SOCIETE TUBERIES, SAN DIEGO, CALIF.]  
- p0317 H82-31569

...
The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The annoyance of impulsive helicopter noise

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The 400-Bertz constant-speed electrical generation systems

The performance and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades

The preparation and characterization of mixtures of polycyclopentadienes as solid rocket fuels

The influence of Coriolis forces on gyroscopic motion of spinning blades
SYSTEMS PLANNING CORP., ARLINGTON, VA.

Altitude employment concepts for Remotely Piloted Vehicle (RPV) FLIR/TV mission payload
[AD-A1170777] p060 882-3379

NEW CONCEPTS IN AERODYNAMICS FOR AIRCRAFT AND OTHER SYSTEMS
[AD-A113396] p047 882-27322

MECHANICAL PROPERTY CHARACTERIZATION AND MODELING OF STRUCTURAL MATERIALS
[AD-A113841] p047 882-27764

Wind-tunnel evaluation of an aerodynamically convergent, conformable rotor
[AD-A114386] p052 882-28620

SYSTEK TECHNOLOGY, INC., BARTHOLOMEW, CALIF.

The effects of atmospheric turbulence on a quadrotor heavy lift airship
[AIAA 81-1926] p009 882-10220

Optimal terrain-following feedback control for advanced cruise missiles
[AD-A1102460] p034 882-21179

Development of a tentative flying qualities criteria for aircraft with independent control of six degrees of freedom. Analyses and flight test
[AD-A1142191] p0247 882-22191

Functional requirements for the man-vehicle systems research facility
[NASA-CR-1663151] p0352 882-22248

Technical approaches for measurement of human errors
[NASA-CR-166314] p0352 882-22249

A theory of human error

New development in flying qualities with application to rotary wing aircraft
[AD-A1142191] p0246 882-23226

Stability and control of the Gossamer human powered aircraft by analysis and flight test
[NASA-CR-163119] p0557 882-30289

SYSTEMS TECHNOLOGY, INC., MOUNTAIN VIEW, CALIF.

A pilot in the loop analysis of helicopter acceleration/deceleration maneuvers
[AD-A1080987] p0367 882-23229

Training aircraft design considerations based on the successful organization of perception in manual control
[AD-A1080987] p0563 882-30840

Application of a pilot control strategy identification technique to a joint FAA/NASA ground based simulation of head up displays for CV-2 aircraft
[AD-A1080987] p0563 882-30857

SYSTEMS CORP., DAYTON, OHIO.

Digital Avionics Information System (DAIS) documentation
[AD-A108000] p0203 882-17172

TACTICAL AIR WARFARE CENTER, DELAWARE AFB, FLA.

GO-7 and F of the F-16 20+ pure ramjet engine system's ability to upload/download afterburner of the F-16 aircraft
[AD-A1080007] p0192 882-16094

TECHNICAL REPORTS

On the Corrosion problems of the U.S. F-16 National Guard
[AD-A1142191] p0211 882-17354

PILLOW-ISH ISRAEL. INST. OF TECH., HAIFA

Experimental evaluation of a perspective tunnel display for three-dimensional helicopter approaches
[AD-A1080003] p0063 882-15847

Chordwise and compressibility corrections for arbitrary planar slender wings
[AD-A1080004] p0443 882-37931

Dynamic load measurements with delta wings undergoing self-induced roll-oscillations
[AIAA PAPER 82-1320] p0467 882-39098

Lateral aerodynamics of delta wings with leading edge sweep
[AIAA PAPER 82-1386] p0450 882-35142

TECHNICAL UNIVERSITY, BRUSSELS (WEST GERMANY).

On the design of some airfoils for sailplane application
[AD-A1142191] p0265 882-19213

TECHNICAL UNIVERSITY, DELFT (NETHERLANDS).

On the design of some airfoils for sailplane application
[AD-A1142191] p0361 882-23163

TECHNISCHE HOCHSCHULE, AACHEN (WEST GERMANY).

A method of characteristics solution for a finite rotating transonic cascade with thickness effects
[AD-A1142191] p0164 882-15060

TECHNICAL UNIVERSITY, BRUSSELS (WEST GERMANY).

Ground speed measurement from D/AV/DPF omnirange navigation (VOR) data
[AD-A1142191] p0503 882-29116

TECHNICAL UNIVERSITY, BRUSSELS (WEST GERMANY).

Ground speed measurement from D/AV/DPF omnirange navigation (VOR) data
[AD-A1142191] p0402 882-25185

TECHNOLOGY, INC., DAYTON, OHIO.

Development of a Structural Integrity Recording System (SIRS) for US Army AH-1S helicopters
[AD-A1142191] p0591 882-32364

TEL-AVIV UNIV. (ISRAEL).

Fixed gain controller design for aircraft
[AD-A1048777] p0089 882-12081

TELUS RECORD, TOLEDO, OHIO.

Cooled variable nozzle radial turbine for rotor craft applications

TELEDYNE CONTINENTAL MOTORS, KIRKLAND, WA.

Exhaust emissions reduction for intermittent combustion aircraft engines

TELEDYNE CONTINENTAL MOTORS, KIRKLAND, WA.

Lightweight diesel engine designs for commercial turbo type aircraft
[NASA-CR-165470] p0037 882-11060

TELEDYNE SYSTEMS CO., NORTHBOG, CALIF.

Design study report for General Aviation Loran-C receiver
[AD-A104921] p0087 882-12062

TENNESSEE UNIV., KNOXVILLE.

Prediction of aerodynamics loads on aircrafts with external stores at transonic speeds
[AD-A1080003] p0103 882-13013

TENNESSEE UNIV., TULLahoma.

An airport wind shear detection and warning system using Supersonic radar
[AD-A1080003] p0033 882-10220

Linear and non-linear analysis of vortex whistles: Another Blade buster
[AD-A1080003] p0144 882-15067

TENNESSEE UNIV., SPACE INST., TULLahoma.

Simulation of propulsive excitation due to hazardous wind shear
[AIAA PAPER 82-0215] p0117 882-17044

Three-dimensional flow studies on a cuffed transonic wind tunnel wall
[AIAA PAPER 82-0224] p0117 882-17055

The influence of turbulence models on computer-simulated aircraft landing
[AIAA PAPER 82-0362] p0119 882-17096

Analysis of vibration induced error in turbulence velocity measurements from an aircraft wing tip boss

Numerical stability analysis of a compressor model
[TAP-3571] p0540 882-33396

TEXAS A&M UNIV., COLLEGE STATION.

A new thermal and trajectory model for high altitude balloons
[AIAA PAPER 81-1926] p0007 882-10411

Flight test method for the determination of reciprocating engine cooling requirements
[AIAA PAPER 81-2446] p0055 882-13578

Performance degradation of propeller/rotor systems due to ice accretion
[AIAA PAPER 82-0286] p0297 882-28322
The role of voice technology in advanced helicopter cockpits

Fracture mechanics criteria for turbine engine hot section components

Determinations of rotor wake induced empennage airloads

Design of helicopter rotor blades for optimum aeroelastic analysis for helicopter rotors with high modulus materials for use in external fuel vaporization study

Research and development program for nonlinear external fuel vaporization study

Evaluation of fuel injection configuration for control carbon and soot formation in small gas turbine combustors

Helicopter rotor trailing edge noise

Vibration control of turbine engine combustor

Integrated navigation-TF/TA-system based on stored terrain data processing

Aircraft landing gear forces during the takeoff of subsonic and transonic potential flow

Corrosion protection schemes for aircraft structures: Some examples for the corrosion behaviour of Al alloys

Jet effects on forces and moments of a VTOL fighter type aircraft

Advanced casting: Today and tomorrow

Alleviation of the subsonic pitch-up of delta wings

Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices

Subsonic balance and pressure investigation of a 60-deg delta wing with leading-edge devices

Development of high Reynolds number wind tunnel models

Upper Vortex Flap - A versatile surface for highly swept wings

Sediment water interaction

Power system design optimization using Lagrange multiplier techniques
CORPORATE SOURCE INDEX

ATBBLOO OBIT. (OITABIO).
LOOIS, BO.
SASHiisroi OUT. IECBSOLOGJ ASSOCIATES, nc.. si.
BASBIBGTOI OUT.. ST. LOOIS, HO.
iASHIBGTOi Ollf., SEATTLE.
fiHODB-SAi»T-GE»BSB (BZLGIOB).
TOB KABBAH ZBSI. FOB FLUID DIBASICS.
700GBT COBP., OALUS. TBZ.
TIBGIHIA OBIT.. CBARLOTXBSTTBB.
Optimization of auto-pilot eguations for rapid
Design of helicopter rotor blades for optimum
The Schladitz fuel injector: An initial
An experimental investigation of interfacial
Predictions of aerodynamic characteristics of
Lou speed testing of the inlets designed for a
Large-scale vind tunnel tests of a
Finite difference computation of the conical
Limiting performance of nonlinear systems with
Optimal aircraft landing patterns for minimal
Transportation systems evaluation methodology
T/srot Tandem Fan transition section model test
Curved flow mnd tonnnel test of F-18 aircraft
Boiling flow mnd tunnel tests of F-18 aircraft
On the aerodynamics of vindblast
The effects of slight non-linearities on nodal
Stability of boondary layers with porous suction
Strips: Experiment and theory
Transportation systems evaluation methodology
development and applications, phase 3
Optical aircraft landing patterns for manual
impact trajectories
The Schladitz fuel injector: An initial
evaluation without burning
Limiting performance of nonlinear systems with
applications to helicopter vibration control
problems
Identification of terms to define unconstrained
air transportation demands
VOH KARRAH INST. FOR FLOID DYNAMICS,
RHOD-SAINT-GERMES (BELGIUM).
Flinte difference computation of the conical
flow field over a delta wing

WOUGHT CORP., DALLAS, TX.
Transonic three-dimensional viscous-inviscid
interaction for wing-body configuration analysis
[AIAA PAPER 82-0163]
Large-scale wind tunnel tests of a
ding-supported V/STOL fighter model at high
angles of attack
[AIAA PAPER 81-2627]
Low speed testing of the inlets designed for a
tandem-fan V/STOL nacelle
[AIAA PAPER 81-2627]
V/STOL tandem-fan transition section model test
[AIAA-CH-165587]
Predictions of aerodynamic characteristics of
highly maneuverable configurations

WASHINGTON UNIV., SEATTLE.
An experimental investigation of interfacial
temperatures in blade-seal material rubbing of
aircraft compressors
[AIAA PAPER 82-0890]
Application of singular perturbation theory
p0085 882-12050
WASHINGTON UNIV., ST. LOUIS, MO.
Optimization of auto-pilot equations for rapid
estimation of helicopter control settings
[AD-A110739]
Design of helicopter rotor blades for optimum
dynamic characteristics
[NASA-CH-169532]
p0607 882-33374
WASHINGTON UNIV. TECHNOLOGY ASSOCIATES, INC., ST.
LOUIS, MO.
Taming of wind turbines with blade cyclic-pitch
variations
[DE81-029639]
p0661 882-26822
WATERLOO UNIV. (ONTARIO).
Bifurcation analysis of nonlinear stability of
aircraft at high angles of attack
[AIAA PAPER 82-0248]
p0117 882-17862

WEST VIRGINIA UNIV., HOUGTOWN.
Unsteady ejectors
p0362 882-23171
WESTERN GEOGRAPHICAL CO. OF AMERICA, HOUSTON, TX.
Airborne gamma-ray spectrometer and magnetometer
survey. Izipikul river quadrangle, Alaska, volume 2
[DB82-000014]
p0399 882-26420
Airborne gamma-ray spectrometer and magnetometer
survey. Jamestown quadrangle, North Dakota, volume 1
[DB82-004150]
p0399 882-26429
Airborne gamma-ray spectrometer and magnetometer
survey. Jamestown quadrangle, North Dakota, volume 2
[DB82-004169]
p0399 882-26430
Airborne gamma-ray spectrometer and magnetometer
survey. Grant quadrangle, Alaska, volume 2
[DB82-000312]
p0399 882-26432
Airborne gamma-ray spectrometer and magnetometer
survey. Barrow quadrangle, Alaska, volume 2
[DB82-000362]
p0413 882-25623
WESTCOURN ELECTRIC CORP., LIMA, OHIO.
A look into the future: The potential of the
all-electric secondary power system for the
energy efficient transport
p0261 882-19138
WESTLAND HELICOPTERS LTD., HAYES (ENGLAND).
Lubrication breakdowns between gear teeth
p0082 882-17213
WESTLAND HELICOPTERS LTD., YEOVL (ENGLAND).
Intake design with particular reference to ice
protection and particle separators
p0082 882-17218
A study of the techniques of dynamic analysis of
helicopter type structures
p0246 882-18129
Army Lynx: Product development associated to
military combat development
p0247 882-18143
Preliminary thoughts on helicopter cabin noise
prediction methods
p0248 882-18148
The role of simulation in the design process
p0249 882-18154
The dynamic qualification of equipment and
external stores for use with rotary winged
aircraft
p0348 882-22167
WICHITA STATE UNIV., KANS.
Computational and experimental studies of light
twin aerodynamic interference
p0508 882-09030
WISCONSIN UNIV., MADISON.
Nonlinear two-dimensional sail theory
[AD-A110450]
p0405 882-25220
WRIGHT STATE UNIV., DAYTON, OHIO.
Update of the summary report of 1977-1978 task
force on aircraft workload
[AD-A112547]
p0458 882-26258
WILE LABS., INC., EL SEGUNDO, CALIF.
Evaluation of noise control technology and
alternative noise certification procedures for
propeller-driven small airplanes
[AD-A116695]
p0600 882-33151
Effects of filter response on analysis of
aircraft noise data
[AD-A116658]
p0602 882-33167
WILE LABS., INC., HARPERS FV., VA.
Airborne lidar measurements of the Soufriere
eruption of 17 April 1979
p0383 882-33657
WILE LABS., INC., HURTIVILLE, ALL.
Experimental modal analysis of the fuselage
panels of an Aero Commander aircraft
[DE82-000370]
p0026 882-10028
XEROX CORP., EL SEGUNDO, CALIF.
In-flight propeller flow-visualization using
fluorescent miniats
p0597 882-32673
XEROX CORP., EL SEGUNDO, CALIF.
Power system design optimization using Lagrange
multiplier techniques
p0176 882-20743

C-51
<table>
<thead>
<tr>
<th>CONTRACT NUMBER INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>534-02-13-21</td>
</tr>
<tr>
<td>505-43-14</td>
</tr>
<tr>
<td>505-43-23-01</td>
</tr>
<tr>
<td>505-43-23-04</td>
</tr>
<tr>
<td>505-43-33-01</td>
</tr>
<tr>
<td>505-44-13-01</td>
</tr>
<tr>
<td>505-44-13-02</td>
</tr>
<tr>
<td>505-44-21</td>
</tr>
<tr>
<td>505-44-13-01</td>
</tr>
<tr>
<td>505-45-13-01</td>
</tr>
<tr>
<td>505-45-13-02</td>
</tr>
<tr>
<td>505-52-63-05</td>
</tr>
<tr>
<td>506-54-63-02</td>
</tr>
<tr>
<td>506-53-12</td>
</tr>
<tr>
<td>510-57-10</td>
</tr>
<tr>
<td>511-59-12</td>
</tr>
<tr>
<td>516-53-03-12</td>
</tr>
<tr>
<td>530-04-13-02</td>
</tr>
<tr>
<td>530-03-13-07</td>
</tr>
<tr>
<td>530-14-13-01</td>
</tr>
<tr>
<td>532-01-11</td>
</tr>
<tr>
<td>532-02-11</td>
</tr>
<tr>
<td>532-03-11</td>
</tr>
<tr>
<td>532-04-11</td>
</tr>
<tr>
<td>532-05-12</td>
</tr>
<tr>
<td>532-06-11</td>
</tr>
<tr>
<td>533-01-11</td>
</tr>
<tr>
<td>533-01-32</td>
</tr>
<tr>
<td>533-01-43-08</td>
</tr>
<tr>
<td>533-01-43-10</td>
</tr>
<tr>
<td>533-02-01</td>
</tr>
<tr>
<td>534-01-13-06</td>
</tr>
<tr>
<td>534-01-13-14</td>
</tr>
<tr>
<td>534-02-13-01</td>
</tr>
<tr>
<td>534-02-13-01</td>
</tr>
<tr>
<td>534-01-13-21</td>
</tr>
<tr>
<td>504-40 H82-25214</td>
</tr>
<tr>
<td>505-26 H82-20299</td>
</tr>
<tr>
<td>503-77 H82-24301</td>
</tr>
<tr>
<td>503-51 H82-22239</td>
</tr>
<tr>
<td>504-06 H82-25235</td>
</tr>
<tr>
<td>503-01 H82-20145</td>
</tr>
<tr>
<td>502-66 H82-19217</td>
</tr>
<tr>
<td>503-13 H82-21166</td>
</tr>
<tr>
<td>505-31 H82-29271</td>
</tr>
<tr>
<td>505-03-12</td>
</tr>
<tr>
<td>501-94 H82-16808</td>
</tr>
<tr>
<td>501-94 H82-16809</td>
</tr>
<tr>
<td>503-22 H82-21996</td>
</tr>
<tr>
<td>504-47 H82-26219</td>
</tr>
<tr>
<td>505-31 H82-29268</td>
</tr>
<tr>
<td>505-72 H82-31663</td>
</tr>
<tr>
<td>534-02-13-21</td>
</tr>
<tr>
<td>505-26 H82-20299</td>
</tr>
<tr>
<td>503-77 H82-24301</td>
</tr>
<tr>
<td>503-51 H82-22239</td>
</tr>
<tr>
<td>504-06 H82-25235</td>
</tr>
<tr>
<td>503-01 H82-20145</td>
</tr>
<tr>
<td>502-66 H82-19217</td>
</tr>
<tr>
<td>503-13 H82-21166</td>
</tr>
<tr>
<td>505-31 H82-29271</td>
</tr>
<tr>
<td>505-03-12</td>
</tr>
<tr>
<td>501-94 H82-16808</td>
</tr>
<tr>
<td>501-94 H82-16809</td>
</tr>
<tr>
<td>503-22 H82-21996</td>
</tr>
<tr>
<td>504-47 H82-26219</td>
</tr>
<tr>
<td>505-31 H82-29268</td>
</tr>
<tr>
<td>505-72 H82-31663</td>
</tr>
<tr>
<td>778-11-05</td>
</tr>
<tr>
<td>501-01 H82-13908</td>
</tr>
<tr>
<td>778-32-01</td>
</tr>
<tr>
<td>503-16 H82-21193</td>
</tr>
<tr>
<td>778-36-05</td>
</tr>
<tr>
<td>502-64 H82-19205</td>
</tr>
<tr>
<td>922-21-01</td>
</tr>
<tr>
<td>500-85 H82-12042</td>
</tr>
<tr>
<td>992-12-05-03</td>
</tr>
<tr>
<td>500-74 H82-14075</td>
</tr>
<tr>
<td>992-21-01</td>
</tr>
<tr>
<td>500-54 H82-29311</td>
</tr>
<tr>
<td>500-64 H82-33345</td>
</tr>
</tbody>
</table>
### Typical Report/Accession Number Index Listing

<table>
<thead>
<tr>
<th>REPORT NUMBER</th>
<th>PAGE NUMBER</th>
<th>NASA ACCESSION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEE-05-FB-9912</td>
<td>00589</td>
<td>#82-32347**</td>
</tr>
</tbody>
</table>

Listings in this index are arranged alphabetically by report number. The page number indicates the actual supplement 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.
<table>
<thead>
<tr>
<th>Accession</th>
<th>Date</th>
<th>Page</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>82-0567</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0561</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0571</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0574</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0576</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0582</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0588</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0594</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0601</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0601</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0602</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0605</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0606</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0607</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0608</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0614</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0614</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0615</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0616</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0617</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0620</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0621</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0622</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0623</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0632</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0633</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0634</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0635</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0636</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0637</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0638</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0639</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0640</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0641</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0642</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0643</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0644</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0645</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
<tr>
<td>82-0647</td>
<td>1982</td>
<td>1</td>
<td>PAPER</td>
</tr>
</tbody>
</table>

**Note:** The table above represents the accessions and their corresponding pages. Each entry includes the access number, date, and description of the page. The entries are listed in a tabular format for clear readability.
<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
<th>Accession Number</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165750</td>
<td>P0126</td>
<td>H82-10284**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165763</td>
<td>P0126</td>
<td>H82-10284**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165772</td>
<td>P0126</td>
<td>H82-10704**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165774-VOL-2</td>
<td>P0126</td>
<td>H82-10704**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165794</td>
<td>P0126</td>
<td>H82-12052**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165803-VOL-1</td>
<td>P0126</td>
<td>H82-14059**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165806</td>
<td>P0126</td>
<td>H82-15014**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165813</td>
<td>P0126</td>
<td>H82-16070**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165818</td>
<td>P0126</td>
<td>H82-21532**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165820</td>
<td>P0126</td>
<td>H82-21532**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165826</td>
<td>P0126</td>
<td>H82-22214**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165829-VOL-1</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165829-VOL-2</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165837</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165841</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165849</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165850</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165851</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165855</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165859</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165866</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165878</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165899</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165933</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165940</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165950</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165955</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165964</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165965</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165968</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165974</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165879</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165884</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165890</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165891</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165892</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165893</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165894</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165895</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165896</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165897</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165919</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165926</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165932</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165938</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165942</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165947</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165948</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165949</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165950</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165951</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165952</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165953</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165954</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165955</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165956</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165957</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165958</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165959</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165960</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165961</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165962</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165963</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165964</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165965</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165966</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
<tr>
<td>HASi-CB-165599</td>
<td>HASi-CB-165968</td>
<td>P0126</td>
<td>H82-23448**</td>
</tr>
</tbody>
</table>

** indicates that the item is not available.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>REPT-80/7</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-80/83-194</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-41</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-465</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-181-320-100</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>SAB-82-200</td>
<td></td>
<td>958</td>
</tr>
<tr>
<td>REPT-82-326</td>
<td></td>
<td>958</td>
</tr>
</tbody>
</table>
### REPORT/ACCESSION NUMBER INDEX

<table>
<thead>
<tr>
<th>Report/Accession Number</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>05AA/VB/ADCO-TB-79-0270-3</td>
<td>0037</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-79-0270-4</td>
<td>0069</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-80-P-30A</td>
<td>0306</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-80-P-30B</td>
<td>0258</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-80-P-10-VOL-1</td>
<td>0396</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-23</td>
<td>0091</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-11</td>
<td>0395</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-15</td>
<td>0151</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-16</td>
<td>0096</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-20</td>
<td>0132</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-21A</td>
<td>0321</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-21B</td>
<td>0451</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-23A</td>
<td>0306</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-24</td>
<td>0133</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-26</td>
<td>0133</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-27</td>
<td>0186</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-28</td>
<td>0269</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-29</td>
<td>0469</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-30</td>
<td>0451</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-32</td>
<td>0573</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-34</td>
<td>0573</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-36</td>
<td>0521</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-37</td>
<td>0521</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-38</td>
<td>0006</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-40</td>
<td>0306</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-42</td>
<td>0312</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-44</td>
<td>0506</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-46</td>
<td>0566</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-48</td>
<td>0566</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-49</td>
<td>0566</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-50</td>
<td>0610</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-52</td>
<td>0676</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-54</td>
<td>0568</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-56</td>
<td>0199</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-58</td>
<td>0604</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-60</td>
<td>0095</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-62</td>
<td>0526</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-64</td>
<td>0473</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-66</td>
<td>0085</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-68</td>
<td>0568</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-70</td>
<td>0199</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-72</td>
<td>0604</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-74</td>
<td>0089</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-76</td>
<td>0405</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-78</td>
<td>0087</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-80</td>
<td>0265</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-82</td>
<td>0257</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-84</td>
<td>0199</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-86</td>
<td>0258</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-88</td>
<td>0602</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-90</td>
<td>0600</td>
</tr>
<tr>
<td>05AA/VB/ADCO-TB-81-L-92</td>
<td>0333</td>
</tr>
</tbody>
</table>
AERONAUTICAL ENGINEERING
A CONTINUING BIBLIOGRAPHY

Abstracts
January — December 1982

TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SP-7037 Supplement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td>1</td>
</tr>
<tr>
<td>146</td>
<td>43</td>
</tr>
<tr>
<td>147</td>
<td>103</td>
</tr>
<tr>
<td>148</td>
<td>149</td>
</tr>
<tr>
<td>149</td>
<td>217</td>
</tr>
<tr>
<td>150</td>
<td>273</td>
</tr>
<tr>
<td>151</td>
<td>325</td>
</tr>
<tr>
<td>152</td>
<td>373</td>
</tr>
<tr>
<td>153</td>
<td>415</td>
</tr>
<tr>
<td>154</td>
<td>481</td>
</tr>
<tr>
<td>155</td>
<td>543</td>
</tr>
<tr>
<td>156</td>
<td>559</td>
</tr>
</tbody>
</table>
This bibliography is a cumulative index to the abstracts contained in NASA SP-7037 (145) through NASA SP-7037 (156) 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.

**Key Words (Suggested by Author(s))**
- Aerodynamics
- Aeronautical Engineering
- Aeronautics
- Bibliographies

**Distribution Statement**
Unclassified - Unlimited

**Price**
$10.00 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 and Information Center

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 and Hamilton County Public Library
Cleveland Public Library
Dayton Public Library
Toledo and Lucas County 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, 555 West 57th Street, 12th Floor, New York, New York 10019.

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.